VOL. VIII NOVEMBER 1942 No. 11

DISEASES OF THE CHEST

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Editorial Comment

Middle Atlantic States Issue

In conformity with a policy which was started at the inception of this journal, one issue of *Diseases of the Chest,* is devoted each year to the presentation of a picture of sanatorium facilities and of the advances made in tuberculosis control in one state or in a group of states in this country.

The following special issues have been published to date:

1935 August, Vol. I, No. 6—New Mexico Issue

1936 May, Vol. II, No. 5—Missouri Issue

1937 June, Vol. III, No. 6—South Atlantic States Issue

1938 June, Vol. IV, No. 6—Pacific Coast States Issue

1939 October, Vol. V, No. 10—Mississippi Valley States Issue

1940 December, Vol. VI, No. 12—Ohio and West Virginia States Issue

1941 April, Vol. VII, No. 4—Southwestern States Issue

This year it is our privilege and pleasure to dedicate this issue of *Diseases of the Chest* to the District of Columbia and the States of Delaware, Maryland, Pennsylvania and New Jersey. The issue is to be known as the *Middle Atlantic States Issue.*

Each of the States and the District of Columbia have contributed scientific papers, dealing with subjects related to chest diseases, and written by physicians who are closely identified with the treatment of chest diseases.

Each of these States and the District of Columbia have presented a picture through the printed word and by illustration, showing the present facilities for the treatment of the tuberculous.

This issue of the Journal also carries the photographs of physicians in the District of Columbia and the States of Delaware, Maryland, Pennsylvania and New Jersey, who have pioneered in tuberculosis work or who hold office in the College. We pay tribute to these pioneers and leaders of the College and only regret that we do not have the space available to include the photographs of many more of the eminent physicians who have aided in this great cause.

The Editorial Board of *Diseases of the Chest* expresses its appreciation to the State Chairmen under whose direction this issue of *Diseases of the Chest* was compiled, and also the officials of sanatoria, tuberculosis societies, and to all of the other individuals and agencies that have cooperated with us to make this issue of *Diseases of the Chest* possible.

R. C. M.

VOL. VIII NOVEMBER, 1942 No. 11

DISEASES OF THE CHEST

MIDDLE ATLANTIC STATES ISSUE

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DISTRICT OF COLUMBIA SECTION

J. WINTHROP PEABODY, M.D.
WASHINGTON, D. C.
President, American College of Chest Physicians.
General Chairman, Middle Atlantic States Issue.

WILLIAM D. TEWKSBURY, M.D.
WASHINGTON, D. C.
Chairman, District of Columbia Section, Middle Atlantic States Issue. Governor, American College of Chest Physicians, District of Columbia.

THE TUBERCULOSIS MOVEMENT IN THE DISTRICT OF COLUMBIA

The organized anti-tuberculosis work in the District of Columbia started about 1908 and was sponsored originally by Dr. George M. Kober, who was Dean of Georgetown Medical School. Associated with him in the Tuberculosis Association in the early days were such well-known figures as George Sternburg, Surgeon General of the U. S. Army, and later Dr. Harvey W. Wiley, who sponsored the Pure Food and Drug Act. It was through Dr. Kober's efforts that an appropriation was obtained from Congress to build a Tuberculosis Hospital for the District of Columbia and this institution was opened in July, 1908. The Tuberculosis Association maintained a chest clinic for Washington for a number of years and this was taken over by the Health Department about 1915. It has since been operated on funds appropriated by Congress. Dr. W. D. Tewksbury was the first physician in charge of the Health Department Clinic, followed by Dr. J. Winthrop Peabody and then by Dr. A. Barklie Coulter.

The Tuberculosis Association which obtains its funds from the sale of Christmas Seals has also financed a number of measures designed to reduce the tuberculosis rate. The association has financed x-ray films of school children, paid salaries for additional visiting nurses and has always been in the foreground in urging Congress to appropriate additional funds and enact necessary legislation which would improve the control of tuberculosis in the District of Columbia. They have financed the Health School and the Health Camp—both for incipient tuberculosis in children. The Association has also sponsored programs for the Medical Society and for radio. Mrs. Ernest R. Grant was for many years executive secretary of the District of Columbia Tuberculosis Association and she was succeeded by Mr. Harald Lund, who is now in office. At the present time, Dr. J. Winthrop Peabody is president of the Association.

The death rate for tuberculosis in the District of Columbia was cut in half from 1908 to 1918, but there was an increase in the rate among the colored population from 1920 to 1924. In recent years, Congress has been more liberal with funds for the Health Department Chest Clinic. This has probably resulted in a further lowering of our death rate, but there is still a great deal to be done before tuberculosis can be entirely eradicated or at least reduced to a minimum.

District of Columbia Sanatorium

GLEN DALE SANATORIUM

Unit B

GLENN DALE, MARYLAND

Glenn Dale Sanatorium, Glenn Dale, Maryland, was formed by combining the Children's Tuberculosis Sanatorium, located at Glenn Dale, Maryland, with the Tuberculosis Hospital of the District of Columbia, located in Washington, D. C. The children's building (now known as Unit B) was opened at Glenn Dale in September, 1934, and the adults' unit (now known as Unit A) was moved from Washington to Glenn Dale in September, 1937. There are approximately 100 beds for children and 585 beds for adults in the institution. Due to the increased demands for beds for adults both units now admit adults but children are admitted only to Unit B. Patients of all races and denominations, male and female, of all ages, with all types of tuberculosis and all stages of the disease are admitted.

Complete medical service is provided for all patients by the resident medical staff, which includes a resident thoracic surgeon. It is further supplemented by the services of a complete consulting staff in all the medical specialties. This consulting staff is composed of physicians practicing in the District of Columbia. The sanatorium is operated by the Health Department of the District of Columbia. Dr. William D. Tewksbury was Superintendent from February, 1911, to September, 1921. Dr. J. Winthrop Peabody was Superintendent of the institution from September, 1921, to August, 1939. Dr. Daniel Leo Finucane has been Superintendent and Medical Director from August, 1939, to date.

The Treatment of Acute Pulmonary Abscess

WILLIAM D. TEWKSBURY, M.D., F.A.C.P.
and E. RAYMOND FENTON, M.D.
Washington, D. C.

Following our original report in 1917[1] of the cure of two cases of acute pulmonary abscess by the use of artificial pneumothorax, there were a number of reports that were favorable to this method of treatment. Among those so reporting were H. M. Rich,[2] Simon and Sweeney,[3] and O. M. Gilbert[4] of Denver.

Later reports have as a whole been less enthusiastic and recently even discrediting to this pneumothorax procedure for the treatment of lung abscess. Hever[5] in 1940 concluded a report saying that "the use of artificial pneumothorax for the treatment of lung abscess has proved unsatisfactory—it has a field of limited application and it not infrequently fails to achieve its purpose—and it is attended by the danger of pyopneumothorax."

Johnson et al[6] reviewed 165 cases of lung abscess treated by this method and felt that pneumothorax had no place in the management of lung abscess. He felt that a kinking of the bronchus draining the abscess might ensue and thus hinder rather than favor drainage.

At the present time there remain very few advocates of the pneumothorax treatment of lung abscess. Tewksbury[7] in 1918 reported ten cases. Of these, six (60%) were cured, two (20%) were temporarily cured and two (20%) died. He again reported[8] in 1925 on thirty-five cases treated with pneumothorax. Twenty-eight patients (80%) made a complete recovery. In three cases the abscess ruptured into the pleural cavity and surgical drainage through the chest wall produced a cure. Four cases died. One of these four died from an abortion and hemorrhage. In all, ten per cent of the cases reported died. The author stressed the small amount of air injected into the pleural cavity, advising only

one hundred fifty to two hundred cc. of air given from two to five days apart. He found that usually six to seven treatments were necessary.

C. L. Herrell[9] of Norfolk, Virginia, reported in 1936 on twenty-three cases of lung abscess treated by pneumothorax. He had a complete recovery in twelve (52%) of the cases. This was the highest percentage of recoveries reported, using any other form of treatment. He used from one hundred fifty to three hundred fifty cc. of air initially and in two to three days he increased the dosage to as high as 400 cc. Occasionally he got a positive manometric reading and usually a definite anatomical lung collapse.

We feel that pneumothorax has a definite place in the treatment of acute lung abscess. It must be understood, however, that we want drainage of the connecting bronchi—in contradistinction to the treatment of pulmonary tuberculosis, where we give larger doses with the hope and expectation of getting bronchial kinking and atelectasis. Corollys[10] has long used this hypothesis to explain closure of tubercular cavities. Most authorities agree with Corrollys on this point. In the treatment of lung abscess with pneumothorax, very small doses of gas should be given. Seventy-five to three hundred cc. is recommended for the purpose of partial reduction of the negative intra-pleural pressures. We want little or no anatomical collapse of the lung, so as to get no bronchial kinking. These small doses cannot be too strongly stressed for the successful pursuit of this method of treatment. We believe that the poor results obtained by many trying this procedure are due to too large doses, with too much collapse of the lung. This excessive collapse results in a kinking of the bronchus, leading to atelectasis more or less, with the tremendous risk of abscess rupture through the pleura. Since this form of treatment has been done largely by men accustomed to giving pneumothorax for tubercular cavities, it has been thought by many that the identical procedure would work for the non-tubercular abscess. This, we feel, is the error that has discredited pneumothorax for the treatment of lung abscess. The reason for such small amounts of gas, with practically no collapse of the lung, producing such dramatic results in very sick patients is difficult to explain. Clinically, it promotes good drainage expectoration—which materially aids recovery.

Case I—J. A. F. This patient was referred to us by Dr. William Gill on April 18, 1939. He gave a history of pain in the back of the left chest and a bronchial cough with a bloody sputum that started early in March, 1939. The patient complained that the sputum had a bad taste at times. He lost ten pounds in weight in February and March of 1939. An x-ray taken on April 7, 1939, showed a large cavity out from the left hilus approximately in the middle of the lung. At the same time a sputum examination showed no acid fast bacilli.

One hundred fifty cc. of air was given in the initial pneumothorax treatment on April 15, 1939. This dosage was increased to 225 cc. on April 17; to 225 cc. on April 20; to 300 cc. on April 24; to 325 cc. on April 30; to 350 cc. on May 7; and 350 cc. on May 14, 1939. An x-ray taken on May 13, 1939, showed a large area of infiltration in the region of the previous cavity with some suggestion of cavitation. No pneumothorax was visible on the x-ray. On the 24th of May, another x-ray made visible a partial pneumothorax showing the lung collapsed three-quarters of an inch at the base. At this point there is a small amount of fluid extending up the lateral chest wall for two thirds of its distance where it is lost at the angle of the scapula at the periphery. An x-ray taken on July 9, 1939, shows two and a half inches of collapse at the left base with some fluid and a partial pneumothorax of the lower half of the lung. He made an uneventful recovery.

Case II—J. G. This patient was referred to us by Dr. Pickford on April 1, 1940. For the past two and a half weeks he had had a chest cold with a cough, but no expectoration. He had a stabbing pain in the left upper chest and back when he coughed. The patient was unable to raise his arm due to pain. The pain spread to both chest and back. The cough had been worse for the past week, but there was still no expectoration. He had a temperature accompanied by a cold feeling.

An x-ray taken on April 1, 1940, showed an area involving the left upper lung suggesting pneumonia or lung abscess. He was given a sulfa drug for three days with no benefit. He continued to run a high and septic temperature and for the first time coughed up

foul-smelling pus with some blood.

Pneumothorax was begun April 3, 1940, with 150 cc. The treatment was repeated April 5 with 175 cc.; April 7 with 200 cc.; April 10, 200 cc.; and April 14, 150 cc.

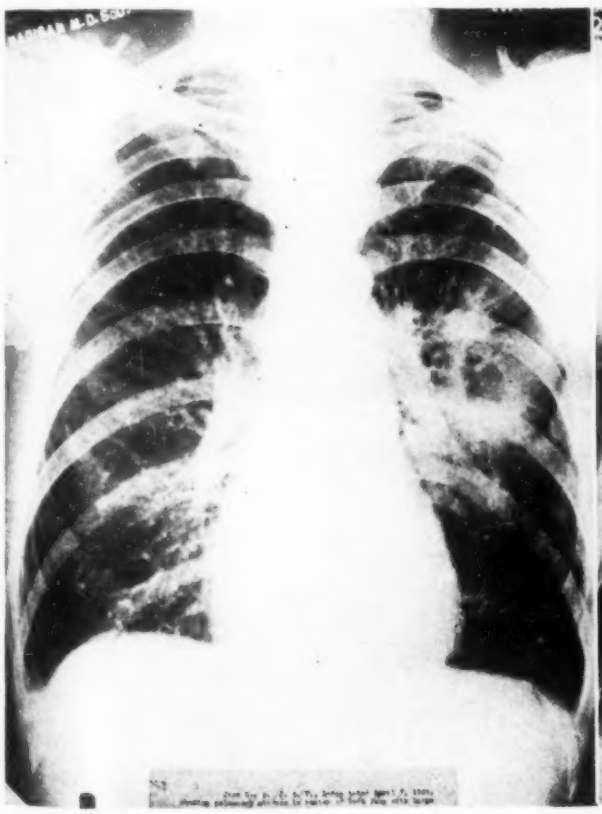
The patient had a normal temperature after the fourth treatment and was allowed to leave the hospital. He came to the office April 21 with practically no symptoms and the fluoroscope showed much improvement. He was given 125 cc. of air. Mr. G. was asymptomatic at this time and insisted on going on a new government job that he "had to report for or lose." He did this against our advice.

When he again reported to the office, pneumothorax was attempted, but no space was found. An x-ray taken on May 12, 1940, showed some increased density of the left upper lung still persisting though much less than previously. No ulceration was present.

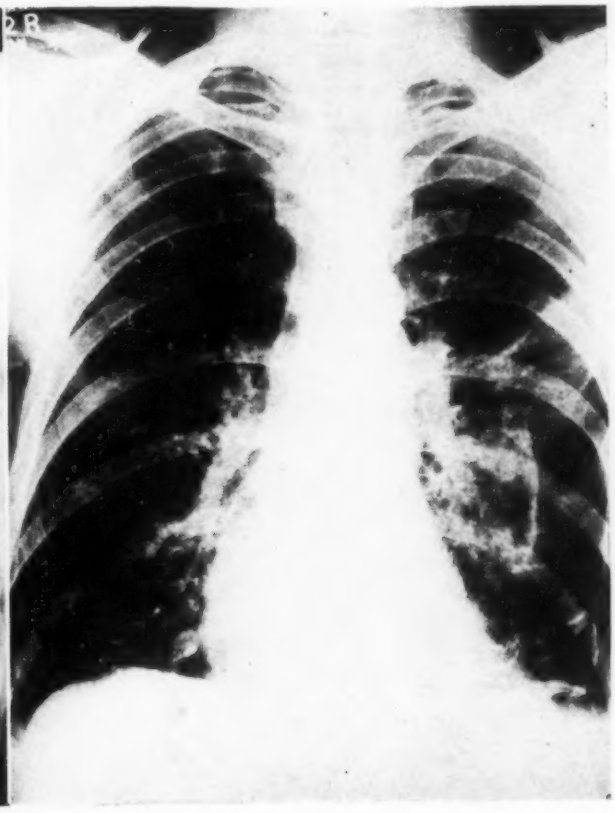
On June 5, 1940, the patient reported some return of the cough with some expectoration with a foul odor. Mr. G. was operated upon at Johns Hopkins Hospital on August 2, 1940, and the left lung was drained. The same day he had a hemorrhage from the wound and died.

This patient made a tremendous improvement following the pneumothorax treatment, and should have been a cured case. He had a fairly long period without symptoms and the failure of complete cure we attribute to his going to work too soon, and an inability to continue the pneumothorax over a long enough period of time.

Case III—Miss A. R. A fifty-three-year-old woman was referred to us by Dr. R. L. DeSaussure. She was first seen on Sept. 23, 1941. She had had a tonsillectomy ten days previously. Two days later she had a stitch pain under the right shoulder, but this subsided and she went back to work. She felt badly on Sept. 21 while at work, complaining of some stitch pain in the right chest and bloody expectoration and a temperature of 101.5 degrees. The original examination showed an acutely sick woman in bed, complaining of pain under the right shoulder on respiration and cough. The temperature was 103,



Case No. 1. J. A. F., x-ray taken April 7, 1939, showing pulmonary abscess in center of left lung with large cavity.



Case No. 1. J. A. F., x-ray taken May 24, 1939, showing partial pneumothorax in the lower two-thirds of left lung with cavity practically closed. X-ray film taken one month later showed complete absorption of the abscess.

pulse 97, blood pressure 145/65. There were no positive physical signs in the chest.

An x-ray taken the following day showed an abscessed area on the right side from the level of the top first rib anteriorly to the bottom of the third rib anteriorly and involving one-fourth of the right lung field. In the upper part of this area there was a suggestion of cavitation.

On Sept. 25, 100 cc. of air was given into the right pleural cavity with no untoward symptoms. This was repeated on Sept. 27 with 150 cc. of gas. On Sept. 30, 175 cc. was given and the patient had a normal temperature. On October 3, 1941, the patient had a chill and the temperature rose to 103 degrees. She complained of coughing and had a bloody purulent foul expectoration. On October 4, 125 cc. of gas was given. One hundred twenty-five cc. was given on Oct. 10 at which time the patient was again feeling good with a normal temperature. We gave her 200 cc. on Oct. 17. On this day we noted that she had a normal temperature for ten days with a small amount of expectoration, with some foul odor. She was eating and feeling all right. On Oct. 24, 100 cc. was given. An x-ray film at this time showed slight amount of scarring in the region of the second interspace, close to the sternum.

Case IV—Maj. J. B. H. This patient was referred to us by Dr. R. L. DeSaussure on January 21, 1938. He had a sub-mucous resection on Dec. 3, 1937. Following this, he had some elevation of temperature. He first noticed foul smelling and tasting pus about Dec. 24, 1937.

An x-ray film taken January 22, 1938, showed an area of increased density and consolidation involving the greater part of the right upper lobe, but not involving the apex above the clavicle. Just below the second rib anteriorly in the periphery of the lung field, there was a fluid level in a fairly large-sized cavity.

Pneumothorax was begun on the right side Jan. 22, 1938, with 150 cc.; January 24, 200 cc.; January 30, 250 cc., and on February 3, 250 cc. On February 4, the patient coughed up a large amount of bloody mucous and pus with temperature to 102 degrees. Pneumothorax was given February 8 with 150 cc.; February 12, 150 cc.; February 17 the patient reported no cough and expectoration. An x-ray on April

Case No. 3. Miss A. R., x-ray films taken September 24, 1941, showing pulmonary abscess upper inner lobe of right lung.

Case No. 3. Miss A. R., x-ray film taken one month later, October 4, showing complete absorption of the abscess.

27 showed normal lungs.

Case V—Mrs. E. A. K. This patient was first seen by us on Oct. 14, 1937. She had had a tonsillectomy three weeks previous to this. One week following this she developed a hacking cough, a pain in the upper right chest and an elevation of temperature. X-ray taken on Oct. 11, 1937, showed a large lesion involving the right upper lobe with suggestion of cavitation. Artificial pneumothorax was done on October 14. One hundred fifty cc. of air was used. Two hundred cc. on the 16th of October; 250 cc. on the 19th; 200 cc. on the 23rd; 200 cc. on the 29th, at which time her fever was reduced and she was feeling much better. Portable x-ray films taken at this time failed to show any pneumothorax, but showed quite a bit of clearing of the lesion, especially in the upper part. On November 1 she was given 300 cc.; November 9, 250 cc. At this time her cough and expectoration had stopped and she was running a little low-grade temperature, less than 100 degrees. X-ray films taken on Dec. 1, 1937, showed a small localized area between the second and third rib anteriorly, about the size of a quarter. There was no evidence of cavitation. X-rays taken on Jan. 8, 1938, showed still a slight amount of infiltration.

Summary

We have treated a total number of forty-five cases of acute pulmonary abscess with artificial pneumothorax since 1916. Of this number thirty-five, or 75 per cent, have recovered and four have died—a mortality of about 9 per cent. We feel the failure of other observers to obtain as good results has been due chiefly to the use of too large and too frequent doses of gas. Attempting to treat chronic abscesses of over two months' duration may also have contributed to less favorable results.

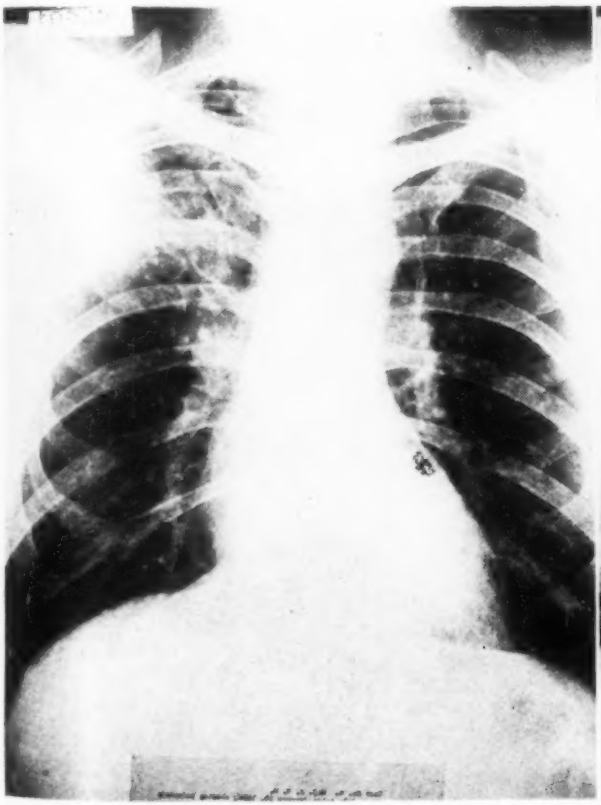
We feel that the use of artificial pneumothorax has a definite place in the treatment of acute pulmonary abscess.

References

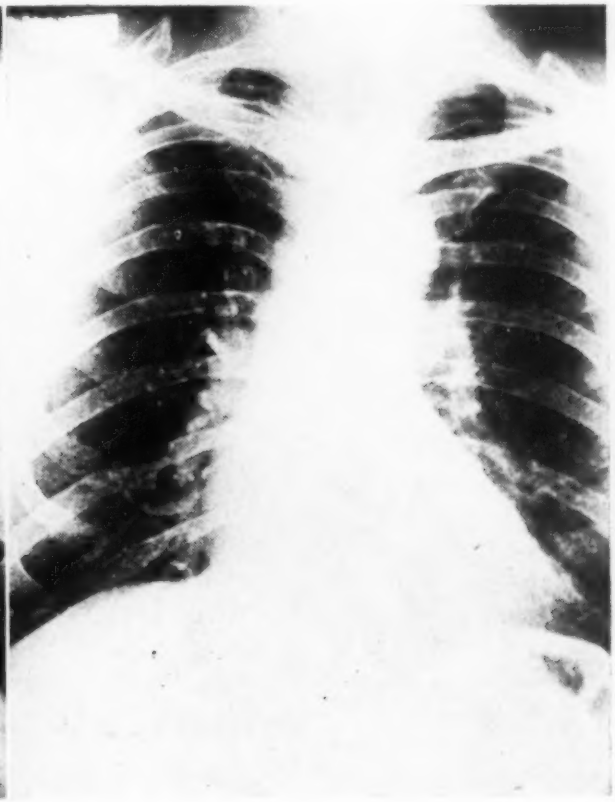
1 Tewksbury, W. D.: "Acute Pulmonary Abscess Treated with Artificial Pneumothorax," *J. A. M. A.*, 1917, 68, 770.

2 Rich, H. M.: "Acute Lung Abscess Treated by

(Continued on page 340)



Case No. 4. Maj. J. B. H. X-ray film taken January 19, 1938, showing pulmonary abscess upper lobe of right lung with cavitation.



Case No. 4. Major J. B. H., taken April 27, 1938, showing abscess completely healed.

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MARYLAND SECTION

Victor F. Cullen, M.D., State Sanatorium, *Chairman*

History of the Tuberculosis Movement in Maryland

WILLIAM B. MATTHEWS, JR.*

Baltimore, Maryland

Maryland is known as the cradle of the national fight against tuberculosis as it was the direct outgrowth of the tuberculosis exhibit of 1904 that the National Tuberculosis Association was formed.

This now historic exhibit was opened during the last week of January in 1904 with lectures, demonstrations, and conferences. The exhibit was divided into ten sections: statistics; tenements; state and municipal prophylaxis; hospitals and sanatoriums; books and portraits; domestic prophylaxis and house hygiene; district nursing; manufacturing exhibits; an exhibit of the National Sanatorium Association of Canada; and pathological anatomy, bacteriology and photography. The exhibition was surpassed only by the International Congress in 1908 and that was organized to a very considerable extent on the plan of the Baltimore exhibit.

Speaking on the work leading up to the exhibit of 1904, Doctor William Welch, on May 28, 1929, at the Founders' Dinner of the National Tuberculosis Association, said, "The exhibit is of historic interest and it is really the background on which was founded the Association. It was all due to Dr. John S. Fulton. In 1901, it was decided to make a survey of the tuberculosis situation in Maryland with a view of securing on the basis of this survey an appropriate legislation. He visited Governor Smith in December, 1901, and succeeded in interesting him so that the Governor recommended in his message in 1902 to our Legislature the establishment of a tuberculosis commission to make a study of the tuberculosis situation in Maryland."

The Commission was created, Dr. William S. Thayer was made Chairman, John M. Glenn, Secretary, and Dr. Marshall Price replaced Dr. Fulton during the time Dr. Fulton was engaged in the Sixth International Congress on Tuberculosis.

The Commission at the end of two years had made a survey and made a preliminary report, and it was thought that the most effective thing to stir up popular interest would be to have an exhibit, a tuberculosis exhibit. That exhibit was under the auspices of the Tuberculosis Commission of which Dr. Thayer was the President, the Maryland Public Health Association, which was created by Dr. Fulton in 1898, and the State Board of Health. They began to work on the exhibit in July, 1903.

Another direct result of the tuberculosis exhibit was the formation of the Maryland Tuberculosis Association. Doctor Henry Barton Jacobs served as its first president while Doctors Thayer, Welch, Fulton, and Osler were active in the organization's growth.

In 1904, the first tuberculosis visiting nurse was appointed and supported by a contribution of Mrs. William Osler. In 1908, two tuberculosis nurses were appointed by the Baltimore City Health Department and this was increased to twenty in 1915.

In 1910, the City Health Department organized a Division of Tuberculosis and in 1912, two tuberculosis dispensaries were opened, and in 1913, a tuberculosis clinic was also opened.

Tuberculosis clinics were established in rural Maryland in the early 1920's with the joint cooperation of the Maryland Tuberculosis Association and the Maryland State Department of Health. In the beginning it was limited to a relatively few clinics. However, it has been expanded until today every county in the state with the exception of two have at least one clinic per month and in 1941, those two counties had a total of nine and eight clinics respectively.

In 1941, in the twenty-three counties of Maryland there was a total of 352 clinics which were attended by 7,002 patients of which 5,060 were white and 1,942 Negro. All of these clinics are equipped with x-ray facilities and all patients are x-rayed at the discretion of the clinician.

All case-finding work in the counties of Maryland is run in close cooperation with the County Health Department as the Association fits into their program of control no matter what it might be. In the past year, the Maryland Tuberculosis Association has placed emphasis upon the x-raying of selected groups such as the National Youth Administration students, Juniors and Seniors of the various State Teachers' Colleges, and industrial workers.

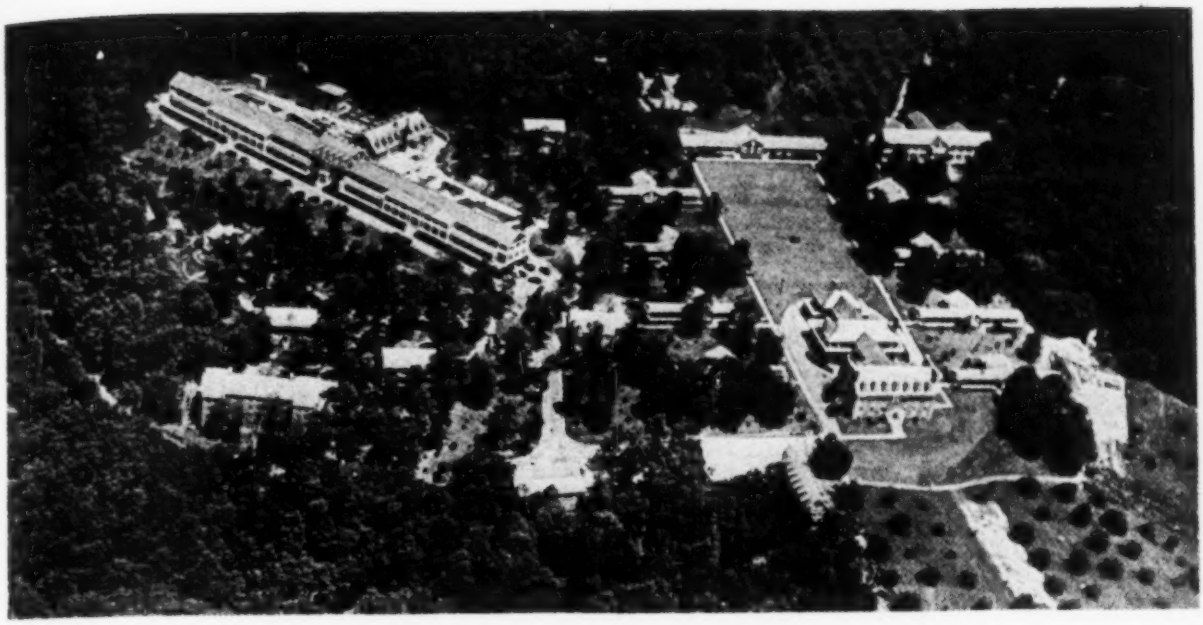
In Baltimore City, from September to December 31, 1941, the Maryland Tuberculosis Association, at the request of the Selective Service Medical Director, x-rayed all registrants as part of their Local Board examination. This work was also carried on by the Association in the counties in cooperation with the county health officers. During this period there were 4,084 registrants x-rayed in Baltimore City of which 63, or 1.54 per cent, were classified as 4F or unfit for military service because of tuberculosis. 2,095, or 51.8 per cent, had negative chest x-rays, whereas 1,926, or 47.2 per cent, were classified as 1A but diagnosed as primary infection, inactive. Of the total number, 1,582, or 38.7 per cent, were Negro, while 2,502, or 61.3 per cent were white. Of the Negroes, 29, or 1.83 per cent, were classified as 4F because of tuberculosis while among the white registrants 34, or 1.36 per cent, were turned down because of tuberculosis. The figures for the counties are not available at this time.

The Baltimore City Health Department maintains a Bureau of Tuberculosis under the direction of a full-time medical director. The general program parallels that of the State Department of Health and, as in all other activities, there is a close cooperation between both departments as well as with the Maryland Tuberculosis Associa-

(Continued on page 340)

*Managing Director, Maryland Tuberculosis Association.

Maryland Sanatoria



MARYLAND TUBERCULOSIS SANATORIUM

(Aerial View)

STATE SANATORIUM, MARYLAND

The Maryland Tuberculosis Sanatorium was first opened in 1908 for all stages of pulmonary and glandular tuberculosis. Children are admitted in a separate building. The total capacity of the sanatorium is 510. Diagnostic and treatment facilities consist of x-ray, pneumothorax, bronchoscopy, thoracoplasty and all types of thoracic surgery. Out-patient service available through the state department of health. Dr. Victor F. Cullen is Superintendent.

MOUNT WILSON SANATORIUM

MOUNT WILSON, MARYLAND

HOSPITAL BUILDING

The Mount Wilson Tuberculosis Sanatorium was first opened in 1926 for all stages of pulmonary tuberculosis. Negro cases needing thoracic surgery are admitted into a separate ward. The total bed capacity of the sanatorium is 210. Treatment facilities and diagnostic facilities consist of x-ray, pneumothorax, thoracoplasty and all types of thoracic surgery. Out-patient department available for follow-up and case-finding. Dr. Stewart S. Shaffer is the Superintendent.

Maryland Sanatoria

HOSPITAL AND MEDICAL BLDG.

EUDOWOOD SANATORIUM

TOWSON, MARYLAND

Eudowood Sanatorium, incorporate name, Hospital for Consumptives of Maryland, was organized in 1894 and opened its doors for patients in the spring of 1896, in a small converted rented dwelling in Baltimore. In the fall of 1899 property was purchased and the institution moved to its present site. The bed capacity was 6 in Baltimore and 16 when first opened in the country.

Eudowood was among the pioneer institutions to offer free treatment to the indigent tuberculous, and also to apply modern methods of treatment, artificial pneumothorax having been instituted in the spring of 1911 by Dr. Martin F. Sloan, then superintendent.

The present bed capacity is 196 of which 48 are children, including infants. The sanatorium is divided into 4 separate units: Hospital for advanced and the very ill patients; Sanatorium—cottages and infirmary—for ambulant and semi-ambulant; Convalescent Colony for prolonged treatment of chronic cases, and the Children's Hospital. There are 11 private rooms in the Medical Building.

The grounds consist of 347 acres of which 150 are in cultivation, on which there is a modern dairy and poultry farm. All milk and eggs are produced on the place. Forty acres are set aside for buildings and lawns.

The location is ideal, being 8 miles from the center of the city, 1 mile from Towson and the car line, a peaceful and restful place, as the stem word of Eudowood means contentment.

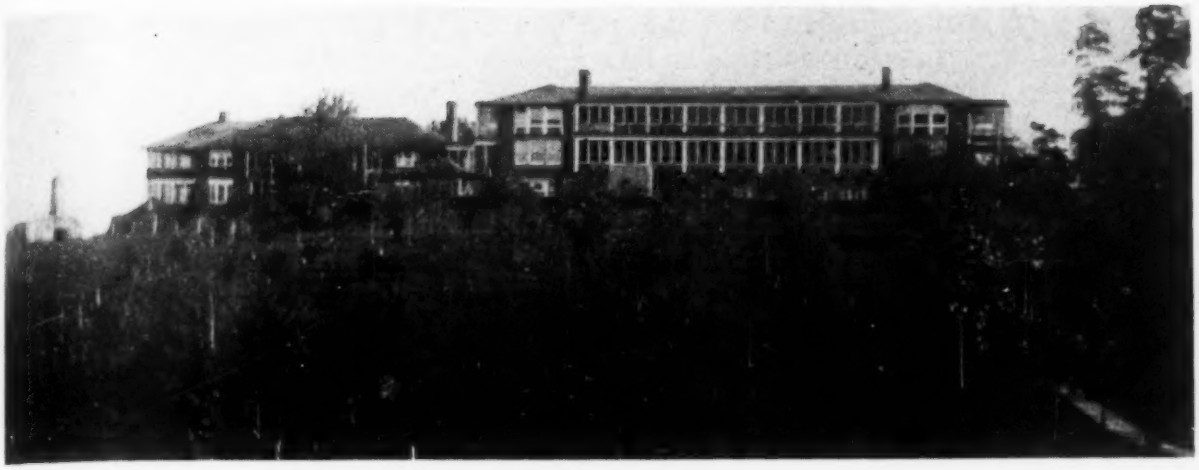
EASTERN SHORE TUBERCULOSIS SANATORIUM

SALISBURY, MARYLAND

HOSPITAL BUILDING

The Eastern Shore Sanatorium was completed and opened in 1913, as the Pine Bluff Sanatorium. It was taken over by the Maryland Tuberculosis Sanatorium Commission in 1927. Children are admitted to the sanatorium, and the total bed capacity is 78. Diagnostic and treatment facilities available are x-ray, pneumothorax, and bronchoscopy. Cases requiring thoracic surgery are sent to Mount Wilson Sanatorium. The Superintendent of the sanatorium is Dr. Paul Cohen.

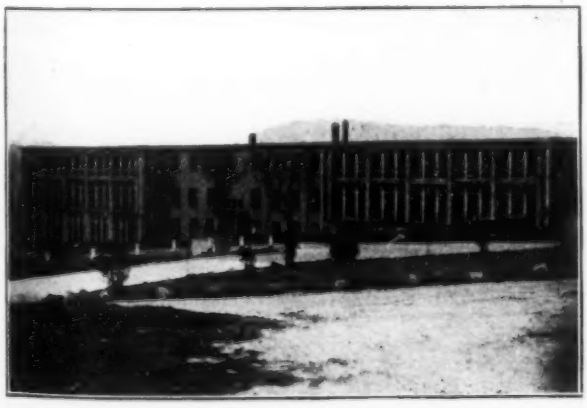
Maryland Sanatoria



Mount Pleasant Sanatorium

Reisterstown, Maryland

Mount Pleasant was founded by Mr. Jacob Epstein of Baltimore in 1908 and then was known as The Jewish Home for Consumptives. The capacity is 60 beds, for adults only. All types of pulmonary tuberculosis are admitted who reside in the State of Maryland. The sanatorium is completely equipped and has all modern appurtenances. About 50 per cent of the patients are treated with some form of collapse therapy. It is located about 17 miles from the City of Baltimore in a beautiful rolling country; elevation about 850 feet above sea level. The Medical Director is Dr. Samuel Wolman who, with a full attending staff, makes regular visits to the institution. Dr. Albert F. Shrier is the Superintendent.



HOSPITAL BUILDING

Henryton Sanatorium

Henryton, Maryland

The colored branch of the Maryland Tuberculosis Sanatorium was opened in Henryton in 1923. It is a sanatorium exclusively for Negroes. All stages of tuberculosis in any form are admitted. Children are admitted in a separate building. The sanatorium has a capacity of 485, of which 67 are children. Diagnostic and treatment facilities are x-ray, pneumothorax, bronchoscopy, phrenic surgery and closed intrapleural pneumolysis. Thoracoplasty is performed at the Mount Wilson Branch of the Maryland Tuberculosis Sanatorium and at Johns Hopkins and Baltimore City Hospital. Dr. Reuben Hoffman is the Superintendent.

The Tuberculosis Problem*
(A Challenge to the Private Practitioner)

REUBEN HOFFMAN, M.D.**
Henryton, Maryland

Is tuberculosis as important as the phthisiologists say it is? After all, tuberculosis ranks seventh among the leading causes of death. Why should it receive more attention than the six diseases that precede it? A careful examination of the problem is in order, since it is the contention of all individuals working in tuberculosis that the disease ranks first in importance both from the medical and public points of view.

Tuberculosis is still the leading cause of death between the ages of fifteen and forty, a span of life that comprises most of the productive years of an individual's existence. If mortality from tuberculosis is considered for race, and that is the immediate problem here, it ranks as the second leading cause of death. Deaths from tuberculosis, however, is not the only factor of importance, nor is it the only factor that makes the tuberculosis problem such a serious one.

Heart disease, cancer, cerebral accidents and nephritis, the first four ranking causes of death, are not contagious. One of these diseases may develop in an individual. The individual may die from it and that ends that particular disease in the particular individual. Not so with tuberculosis. One person contracts it and the number of infected individuals resulting will depend upon the number of people with whom that person has been in daily, intimate contact. On an average, at least three people are infected from one open case of tuberculosis. In an unfavorable, crowded environment, which is anything but unusual, any number may contract it.

In but few other diseases does the following picture occur: Father admitted with far-advanced tuberculosis and progresses to a fatal end. Before his death his wife and six-year-old daughter are admitted with far-advanced disease. Subsequent to his death, his four-year-old son is admitted with serious involvement. The remaining child is found tuberculin positive, but does not require hospitalization. Another case: Mother contracts tuberculosis, but refuses hospitalization. Shortly afterwards an eighteen-months-old child dies from tuberculous meningitis. The mother progresses unfavorably and finally agrees to hospitalization, dying ten days after admission. Within two months two sons, ages three and four, are admitted to the sanatorium and a third youngster is admitted to a general hospital. All the children have serious tuberculous disease. An older child, found tuberculin positive, is deemed able to continue without hospital care. The father miraculously escaped infection. These are not fairy tales, but actual case histories of families still in the sanatorium. They occur often. Consider the number of sanatoria that could present similar cases.

The mortality rate gives no information about the large number of individuals who are rendered chronic invalids and who become either a burden on their families or a problem of the welfare organizations conducted by the various governmental agencies.

The mortality rate gives no inkling of the number of tragedies that are rather frequent occurrences in a family following a death from tuberculosis, which not infrequently results in disruption of the home. This break-up of the home is usually encountered among the poorer class, where the burden of prolonged illness and removal of the chief wage-earner to the sanatorium is more of a load than can be carried. Deaths, desertions, the scattering of children to the homes of relatives or commitments to orphanages are encountered.

Nor from mortality statistics do we glean any idea concerning the tremendous cost associated with the care of the tuberculous. Huge sums from federal, state and municipal governments added to the tremendous loss of income from inability to work make the tuberculosis bill a staggering one. Lately, the public has become acquainted with and perturbed at the loss in man hours of work associated with strikes occurring in industry.

*Read before the Third Annual Conference of Negro Tuberculosis Workers, Howard Medical School, Washington, D. C., June 10, 1941.

**From the Maryland Tuberculosis Sanatorium (Colored Branch), Henryton, Maryland.

If the loss in man hours of work due to tuberculosis were computed, strikes would run a poor second. A worker who strikes loses but a few working days a year. A worker whom tuberculosis strikes usually loses a year or two of working days and not infrequently never returns to work.

Considered from all angles, the above facts should justify the opinion that tuberculosis ranks first in importance. Other diseases may cause more deaths, but not within the age period that is so important. Nor do they present the picture of chronicity, contagion, human tragedies and disruption of the home as does tuberculosis. These factors cannot be measured in money nor can they be gauged by statistics.

The problem is admittedly serious. It is rendered even more serious by an insufficient number of beds, the low economic condition of the average patient, a general lack of knowledge of the disease among the laity, and negligence and lack of interest on the part of many physicians.

The private physician has been frequently accused of a lack of knowledge and interest concerning tuberculosis. Is it true? Taking histories from hundreds of cases entering the sanatorium in a far-advanced stage of the disease frequently results in pointing the accusing finger at the private physician. It is common experience to find patients admitted to the sanatorium with extensive tuberculosis of long standing who have been under the care of their physician for some time. One stethoscopic examination of the chest and a prescription for a cough remedy seems to have been the sum total of the diagnostic procedures and therapy.

Further evidence* that the physician fails to play his part can be gotten from a report recently submitted to the Health Commissioner of Baltimore. In the report it was pointed out that fifty per cent of the cases referred by private physicians to the city clinics for diagnosis had already progressed to a far-advanced stage of the disease; further, that physicians were responsible for reporting only twenty per cent of the new cases and that one-sixth of the cases reported came to the attention of the Health Department for the first time through the medium of a death certificate.

Nearly all patients, at one time during the course of their illness, have been to their private physician with a complaint referable to their tuberculosis. Failure to make the diagnosis at that time, when the prognosis was good and the need for hospitalization relatively short, rests squarely at the door of the physician.

There are certain extenuating circumstances that exonerate the physician for part of the blame: his medical school education in reference to tuberculosis and the literature that he reads about tuberculosis.

Certainly few medical school graduates have anything but the faintest appreciation of the problem of tuberculosis that will confront them in the practice of medicine. It is suggested that the reorganization of the physicians' education start in school, where they should be taught facts about tuberculosis that are important and the problems that they will have to solve when they see tuberculosis in their practice.

Much of the literature that the physician reads about tuberculosis, when he reads any at all, contains articles that assure him that the mortality from tuberculosis is steadily falling and that in fifteen years or so the disease will disappear. It is recommended that such articles be ignored. They aren't true. Tuberculosis is not a disappearing disease. The implication from such an article is that granting a complete reawakening and a revolution in tactics, tuberculosis could be made unimportant in fifteen years. With the present set-up, tuberculosis will neither disappear in fifteen years nor one hundred and fifty years. It will never disappear.

It would be wishful thinking to suppose that there is going to be any immediate marked improvement in the tuberculosis set-up. More beds will undoubtedly be provided, more and better facilities for the detection of tuberculosis will be erected, and increasing information about tuberculosis among the laity will be made available. But these improvements take time. What can be accomplished must be accomplished with the present set-up, be what it may. And a good deal can be accomplished. The private physician can be educated in tuberculosis and when he is trained

*A survey of the facilities for the prevention of tuberculosis in Baltimore, Md.—Allen W. Freeman, M.D., School of Hygiene & Public Health, the Johns Hopkins University, Oct. 31, 1940.

to utilize all the facilities for diagnosis he will represent the most important source for the detection of early tuberculosis. When a method for the systematic detection of early tuberculosis has been organized, the answer to the problem is at hand, since the detection and treatment of the early case is the only hope for the eradication of the disease.

Where are the facilities for the detection of early tuberculosis just referred to? The physician's office. The patients who cross the threshold into the physician's office constitute a large and obviously important group for case-finding. Something is wrong with them, otherwise they wouldn't be in the physician's office. The most obvious group where tuberculosis should be suspected and looked for is in patients seeking medical advice. The material for case-finding is at hand; the remaining step is to take advantage of it.

Should the physician consider every patient who enters his office as a tuberculosis suspect? Why not? One out of every hundred people in the country has tuberculosis. In selected population groups, where the incidence of the disease is high, it may be as high as one out of every twenty. Whatever the percentage is, it is obviously worth the effort it takes to find it. One case of tuberculosis, it must be repeated over and over, does not constitute the total danger of the disease. Human beings are gregarious and tuberculosis is contagious.

How is a diagnosis of early tuberculosis made? Reference to the advanced case is purposely omitted, since the diagnosis is obvious. The detection of the far-advanced cases will no more solve the tuberculosis problem than locking the stable door after the horse has been stolen will prevent the theft of the horse. The ideal time to make a diagnosis is before the sputum has become positive, since this means, in nearly all cases, cavity formation. Since the onset of tuberculosis is usually insidious and since the disease can progress to a serious degree before the patient becomes aware that anything is wrong, the early case will not infrequently escape detection. Symptoms of early disease are too vague and simulate too many other conditions to be a reliable guide. The detection simply requires a routine examination of every patient who enters the physician's office with the purpose of proving the presence or the absence of tuberculosis.

For such a plan the least expensive and simplest method is tuberculin testing. Nearly every person who has been infected with tubercle bacilli will give a positive reaction to the cutaneous or intracutaneous administration of tuberculo-protein. If the result of the test is negative, the patient without pulmonary symptoms can be dismissed as not having tuberculosis. At this point it should be emphasized that the negative test does not guarantee that the patient will always remain free from tuberculous infection. A diagnosis of "non-tuberculous" holds good for only that time at which it is made. It gives no inkling of future infection.

Should the test be positive, and it frequently will be, and should the patient have any signs or symptoms that suggest a respiratory infection, an x-ray of the chest should be taken. The x-ray is specified and not the stethoscope, because it is understood that early tuberculosis is being considered. The stethoscope is a satisfactory implement for the detection of obvious tuberculosis, but an unreliable instrument if solely used to detect early disease. There is nothing more false or more dangerous than the attitude "I can't hear anything, therefore the patient doesn't have tuberculosis." If that physician will go to any sanatorium, he will see many plates of early disease where the physical examination of the chest was negative. He will also see plates showing manifest tuberculosis with cavitation where, too, the physical examination of the chest was negative. And here the examination of the chest was performed by a physician trained in the stethoscopic examination of the chest.

The detection of early tuberculosis is frequently difficult even with the use of x-rays. At times it requires prolonged observation with repeated check-ups. If in doubt, why not call in the man trained in tuberculosis work? Why not consider tuberculosis a disease that requires specialized knowledge and experience? General practitioners don't hesitate to call a surgeon for a suspected acute abdomen; they shouldn't hesitate to call the phthisiologist for an opinion on a chest plate or about a patient. There is no truth to the commonly implied and frequently expressed opinion that tuberculosis doesn't require specialized knowledge and training. It does. A

physician can't read five plates and consider himself qualified. Nor fifty, either. For the sake of the patient it is advisable to consider the diagnosis of early tuberculosis frequently difficult; even if the general practitioners don't, the specialists in the sanatoria do.

The pulmonary lesion may be extremely small according to the x-ray and yet present a sputum heavily loaded with tubercle bacilli. The bacillary concentration of sputum is variable and may on occasions become negative for a time. Frequently, many sputum examinations, supplemented by cultures of the stomach washings and sputum, are required before a positive result is obtained. Health Department laboratories are staffed with competent bacteriologists. All the physician has to do is to give the patient the container with instructions about its use.

A patient who is hoarse for any length of time should be suspected of having a tuberculous laryngitis and x-ray of the chest and sputum examinations become imperative. If the physician automatically, without any examination, called all the cases of chronic hoarseness tuberculous laryngitis, he would be painfully surprised to learn how often he would be right.

Pulmonary tuberculosis still remains the most common cause of blood-spitting. Usually the diagnosis is obvious. Sometimes the diagnosis is anything but obvious. A case of blood-spitting may not be tuberculous in origin, but the physician should demand x-ray proof that it isn't.

Pleurisy, with effusion particularly, is like blood-spitting; it is tuberculous unless it can be proven to be something else. It commonly requires a culture or guinea pig inoculation of the aspirated fluid to prove it, but again, regardless of its appearance it will be, quite commonly, found tuberculous. Tuberculous pleurisy should be treated as a case of minimal tuberculosis and put to bed until the acute phase subsides. The patient should be carefully watched and checked periodically, since a significant percentage of these cases are followed within a few years, many earlier, by pulmonary disease.

Whether a tuberculous pleurisy should be hospitalized in a sanatorium is a moot question. An environment away from tubercle bacilli is unquestionably preferable. Granting a good environment, the patient is just as well off at home, provided the potential danger of the pleurisy is appreciated.

The onset of tuberculosis is not uncommonly acute. It can simulate grippe. Beware of the acute respiratory infection that doesn't subside within the customary interval of time!

The treatment of tuberculosis can be dismissed with a sentence. Active tuberculosis can be safely treated only in a sanatorium. Tuberculosis is a treacherous and dangerous disease and treatment should not be carried out by anyone not familiar with its many-sided clinical and pathological manifestations. It should be remembered that tuberculosis almost invariably affects the lungs, but at the same time may and commonly does affect any part of the body. Complications are not limited merely to the far-advanced case and are more liable to occur under inexpert care.

Education of the tuberculous patient along with the family is of prime importance and not difficult to carry out. Here the physician can accomplish more in one talk than can be accomplished by many other means.

He should, after the diagnosis has been made, convince the patient that prompt hospitalization is necessary. He should persuade every member of the family to be examined, for by this method he may find the source of the infection or detect the infected contacts.

Physicians should keep in touch with their sanatorium patients by visiting them when possible. A visible boost in the patients' morale is observed after such a visit. By this display of interest in the patient, physicians could be of value to the sanatorium staff in combatting that too frequent occurrence of patients leaving against advice or seeking leaves of absences to their homes for the purpose of straightening out minor domestic disturbances. The family, as often as the patient, is hard to convince that this is harmful.

It would be better if physicians refrained from telling patients how long the period of hospitalization will be, because he usually errs considerably on the conservative side. Many of the patients enter the sanatorium with the assurances of their physicians that only three months or so of hospitalization will be necessary. When they learn that three months usually marks just the beginning,

they are cruelly disappointed and frequently discouraged.

When physicians take a greater interest in their tuberculosis patients hospitalized in the sanatoria, spend time in educating them and their families about the disease, a large number of individuals (the ones who need it and will profit by it) will be reached with vital information. It can be done and offers an important source for the propagation of information about the disease, so badly needed.

The patient's discharge from the sanatorium does not constitute the end of the disease. Patients must be closely watched and many rehabilitated. Unless both of these necessary steps are systematically arranged and carried out, a good deal of the accomplishments of the sanatorium will have been in vain, or at best, will have to be repeated. Here, too, the physician can play an important role. Trained, he will be able to help combat the most disheartening of all occurrences, reactivation and spread of the disease.

Tuberculosis, an extremely serious disease from both the medical and public health points of view, taking a terrific toll of human lives, frequently crippling those whom it doesn't destroy, necessitating an enormous outlay of money, both public and private, is a preventable disease. To prevent it, it must be looked for. The private physicians see larger numbers of sick people than any other agency. They must be trained to be tuberculosis conscious, if progress is to be made, and they can and should be the first line of defense.

THE TREATMENT OF ACUTE PULMONARY ABSCESS

(Continued from page 331)

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HISTORY OF THE TUBERCULOSIS MOVEMENT IN MARYLAND

(Continued from page 332)

tion. The Tuberculosis Association has equipped two city clinics with x-ray machines and plates and has just purchased two 4 x 5 machines, one to be used in the Druid Health Center which is in the center of the Negro district of Baltimore, and the other to be used in the Eastern Health District.

The annual death rate per 100,000 population for the total population of the state has declined from 202.1 in 1914 to 71.3 in 1940. In the white population the death rate has declined from 157.5 in 1914 to 44.9 in 1940; and among the Negro population has declined from 405.6 in 1914 to 204.0 in 1940.

As can be seen, the emphasis must be put upon the Negro and to this end all organizations have striven. The State of Maryland has just increased the capacity of the colored branch of the Maryland State Sanatorium by approximately 100 beds which will give an approximate figure of 1.1 beds per Negro death. The Tuberculosis Association has for years carried on a teaching clinic for Negro physicians at the Provident Hospital in Baltimore. In the last two years, in cooperation with the District of Columbia and Virginia Associations, as well as the American Social Hygiene Society, it has sponsored a three-day post graduate seminar for Negro physicians. Special emphasis on Negro health education has been stressed by all organizations.

The trend in the tuberculosis death rate in Maryland is in part ascribed to improvement in the economic status and to a diminishing amount of community infection in consequence of education, case finding, and hospitalization. These are some of the factors within our control and if used to their fullest extent, should encourage the belief of a continued decline in the extent of the disease.

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DISEASES OF THE CHEST

MIDDLE ATLANTIC STATES ISSUE

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DELAWARE SECTION

L. D. Phillips, M.D., Marshallton, Delaware, *Chairman*

The Delaware Tuberculosis Campaign

The Christmas Seal

L. D. PHILLIPS, M.D.*
Marshallton, Delaware

In 1904, at the suggestion of Dr. John J. Black of New Castle, a meeting was called by the late Bishop Coleman at Bishopstead for the purpose of considering what could be done for the tuberculous cases in Delaware. Those present at this meeting were: Bishop Coleman, Drs. Albert Robin, Joseph P. Wales, Irving M. Flinn, John J. Black, P. W. Tomlinson, Ralph Stubbs; also Mrs. Ferdinand Gilpin, Mrs. Jane Pennewill, and Mrs. Fenn. At this meeting, the Delaware Anti-Tuberculosis Society was founded with Dr. Black as president and Dr. Wales as secretary.

Subscriptions were begun, which eventually netted around $4,000.00. With this money a shack was built on the meadow along the Brandywine Creek on ground belonging to the late Mr. Alfred I. duPont. This shack consisted of quarters for eight patients with a bath in the center of the building.

In 1907 the financing of the care of these patients became quite acute, and Dr. Wales consulted Miss Emily P. Bissell relative to the raising of funds to continue this work. Miss Bissell at that time was on the editorial staff of the *Outlook* and secretary of the Delaware Chapter of the American Red Cross, and had been greatly impressed with an article which appeared in the July issue of the *Outlook*, by Mr. Jacob Riis, describing the origin of the Danish Christmas Stamp or Christmas Seal, by Mr. Einar Holboell. Mr. Holboell was a postal clerk in Copenhagen, Denmark, and while engaged in stamping hundreds of letters and packages all carrying messages of good will and happiness for the Christmas season, had a thought: "Why not put a tax on the mail and thereby obtain extra revenue to be used for some philanthropic purpose?" For children—children ill with tuberculosis? The tax should be small, he figured, and should carry something tangible as a reminder that the money was to help bring greater Christmas joy to many sick boys and girls. The Christmas Stamp, as it was called, was the result of his thinking. He aroused the interest of various prominent citizens, who in turn secured the consent of the reigning King Christian IX to honor the memory of the late Queen Louise by using her picture on the stamp. The Government's only stipulation was that the stamps should be different in shape and size from regular postage stamps and the Minister of the Interior granted permission to sell the stamps in the post offices throughout Denmark. They were printed in sheets of fifty and sold for 90 oere or if sold separately they were 2 oere each, about half a cent.

And so that first Christmas Seal sale was held in 1904, December 6 to January 6. In the little country of Denmark everybody soon heard of this new way to help sick children and all were eager to buy and use the stamps. That first year over four million were sold, representing an average of about two for every man, woman and child in the country, and the sum of 68,000 kroner was raised.

Miss Bissell realized what the closing of the shack would mean to these patients and their families. She made up her mind that money must be raised. "Why not try the Christmas Seal device in Delaware?" Again it was persistence, vision and a sincere belief in the penny emblem that were responsible for Miss Bissell's first Christmas Seal sale in America. She designed a seal with a holly wreath, and persuaded two women friends to loan $20.00

*Superintendent, Brandywine Sanatorium.

each to pay for the printing of 50,000 stamps. She secured the interest of the post office, women's clubs, newspapers and shopkeepers who promised to help, and on December 9, 1907, at a table in the corridor of the Wilmington Post Office a girl in Red Cross uniform sold envelopes enclosing 25 seals each to all passersby. On the envelope was printed this message:

25 CHRISTMAS STAMPS

One Penny Apiece

Put this stamp, with message bright,
On every Christmas letter.
Help the tuberculosis fight,
And make the New Year better.

These stamps do not carry any kind of mail but any kind of mail will carry them.

The sales were good even after the enthusiasm of the first day died down. Miss Bissell, however, realized she could extend the sale further and turned to the Philadelphia *North American,* popular newspaper at that time for all nearby cities and towns. There was a columnist on that paper, Leigh Mitchell Hodges, who shared her vision and put the story into every paper from then on through Christmas. It was he, too, who guaranteed to sell all her 50,000 stamps, telling her to print more. They were put on sale in the street floor office of the newspaper. Mr. Hodges told the story in many ways, with a five-column head on the first page of the paper, with editorials and with news stories.

From Jacob Riis came this message to Miss Bissell on December 19: "Good for you and for the Philadelphia *North American*. Keep it up. I am glad the little seed I sowed in the *Outlook* last summer has borne fruit."

One incident of the first sale has become historic through Mr. Hodges' telling, that of a little ragged newsboy. Reaching up to the marble counter higher than his head, this grimy child put down his penny, saying, "Gi'me one. Me sister's got it." "Those seven words settled it," says Mr. Hodges in an article thirty years later published in the *Reader's Digest*. "If a street kid could get the message, the messenger was the kind we needed."

That first sale netted Miss Bissell far more than her fondest dreams had anticipated. Three hundred dollars had been her goal to save the shack, but $3,000.00 was raised; $1,013.97 from the *North American's* sale alone. Delaware was thoroughly convinced of the need for tuberculosis work and through state appropriations a state tuberculosis commission was created.

The following year, Miss Bissell, still making history, personally planned a publicity campaign and circularized 6,000 newspapers all over the United States. An army of volunteers enlisted, and by this enthusiastic effort $135,000 was raised in this first national campaign. In Delaware, a farm was purchased two miles west of Marshallton on which site the present state sanatoria for white and colored patients is now located. Following the purchase of this farm the original shack was moved from the Brandywine to this location; also smaller additional shacks were erected.

In 1909 an appeal was made to the Delaware State Legislature and it allotted $15,000 a year for the treatment of tuberculosis. The Delaware Tuberculosis Commission was appointed to supervise the tuberculosis problem in the state. Mr. Joseph Bancroft was elected president, and Dr. Harold Springer was elected secretary. It was the function of this commission to select the suitable cases for admission to the sanatorium, and to maintain the patients in the institution. This commission also established tuberculosis clinics throughout the state; the majority of these clinics are still operated by the State Board of Health.

In 1911 the Jewish Welfare Society donated a building to the Brandywine Sanatorium. The Catholic Daughters of America also added a brick building about this time.

In 1912 a campaign was conducted for the raising of funds for the present main building. Mr. Pierre S. duPont gave the greater part of the money for the erection of this building. Following its construction, the other buildings and shacks were used for the housing of the staff and help.

No provisions had been made previously for the colored tuberculous patients. In 1915 money was appropriated by the Legislature for the care of these cases. A building on the grounds of the Delaware Anti-Tuberculosis Society was used for this purpose. This was the first sanatorium in the United States and, in fact, in the world, for the treatment of colored tuberculous patients. About two or three years later the Legislature granted money for the purchase of grounds and the erection of a sanatorium for these colored patients. The ground was purchased and a

sanatorium was erected one mile from the Brandywine Sanatorium. The large farm house on the Brandywine grounds was then renovated for the preventorium for children, which is now known as Sunnybrook Cottage.

With the increasing demands upon the Delaware Anti-Tuberculosis Society, the financing became a difficult task so that in 1925 the society offered the sanatorium to the State of Delaware gratis, if the state would assume the responsibility for its future operation. That year the Legislature accepted the responsibility and placed the operation of the sanatorium under the State Board of Health.

The demand for admission to both sanatoria continued to grow, thereby requiring additional buildings. Today Brandywine has two main buildings for adults and a children's building, with a total bed capacity of 160; while Edgewood which received money from the State Legislature to erect a new building, opened in January 1940 on the Brandywine grounds, has a bed capacity of 68.

Previous to the first Christmas Seal sale only eight states had active tuberculosis associations. The Christmas Seal, however, stimulated state after state to organize groups of men and women who in turn influenced local groups to carry on campaigns in their own communities. By 1917 every state in the Union had its own tuberculosis association and together, led by the National Tuberculosis Association, conduct their country-wide well-organized program.

On the twentieth birthday of the Christmas Seal, Miss Emily P. Bissell received congratulations from many of her friends throughout the country. Col. Charles A. Lindbergh flew from Wilmington to Philadelphia, taking from her a package of Christmas Seals which he delivered to the Mayor of Philadelphia—the first Christmas Seals to go on sale there that year.

In 1936, the year of the thirtieth Christmas Seal sale, an anniversary luncheon was given in her honor in Wilmington, Delaware, with Leigh Mitchell Hodges as toastmaster. Almost 500 men and women were present to pay tribute to the continuous and devoted service Miss Bissell has given to the tuberculosis movement. Hundreds of telegrams and messages of congratulation were sent to her, not only from this country, but from many foreign lands where Christmas Seals are sold.

In November, 1937, two nations and the Tuberculosis Associations of the United States honored Miss Bissell—the "Lady of the Christmas Seal."

On the site of one of the early cottages for tuberculosis sufferers, now the home of the Brandywine Sanatorium, scores of men and women from all parts of the country gathered for the unveiling of the bronze plaque, erected by the Tuberculosis Associations of the United States. A national and state committee on arrangements for the program represented every section of the Nation. One of the principal guests at the exercises was Dr. Otto Wadsted, Danish Minister to the United States, in whose country the first Christmas seal of the world was started. He unveiled the tablet. The bronze tablet has this legend:

> "This tablet commemorates the founding of the first Christmas Seal in this country by Miss Emily P. Bissell of Wilmington, Delaware, December, 1907. From small beginnings, the annual Christmas Seal sale has financed the development of the organized fight against tuberculosis, in every state, resulting in saving thousands of lives. Erected by the Tuberculosis Associations of the United States, December, 1937."

Miss Bissell has been president of the Delaware Anti-Tuberculosis Society since 1907—and under her leadership the society has been a very important factor in the fight waged against tuberculosis in the state. For several years the state has enjoyed the highest per capita return from its seal sale of the forty-eight states.

According to the records of the statistical department of the State Board of Health—Delaware's tuberculosis death rate in 1910 was 184 per 100,000 population; in 1941 it was 55.

Tuberculosis Pioneers in Delaware

John Janier Black, M.D.
New Castle, Delaware
1873-1909
First President, Delaware Anti-Tuberculosis Society.

(Photo by Wm. Shewell Ellis)

Miss Emily P. Bissell
Wilmington, Delaware
President, Delaware Anti-Tuberculosis Society.

Officers of the College

Lawrence D. Phillips, M.D.
Marshallton, Delaware
Chairman, Delaware Section, Middle Atlantic States Issue. Acting Governor, American College of Chest Physicians.

Captain Gerald A. Beatty (MC)
Wilmington, Delaware
Governor, American College of Chest Physicians, Delaware. (On military leave.)

Delaware Sanatoria

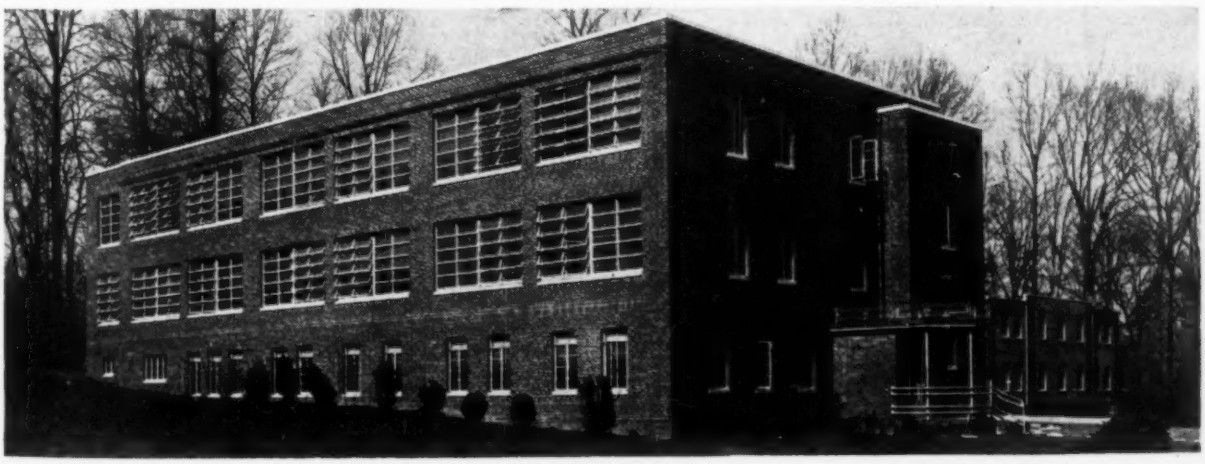
Brandywine Sanatorium

Marshallton, Delaware

The present sanatorium had for its beginning a wooden shack for the care of eight tuberculous patients, situated on ground along the Brandywine, belonging to the late Mr. Alfred I. duPont. The present site was purchased in 1907, and the original shack was moved to this new site, as well as additional small units being constructed; one by the Catholic Daughters of America, and another by the Jewish Welfare Society.

The present administrative building was erected in 1912. In 1927 the buildings and grounds were donated to the state by the Delaware Anti-Tuberculosis Society, who had operated the sanatorium since its beginning. The state has added a 36-bed children's hospital and a 48-bed infirmary building, as well as necessary facility and staff buildings. The present capacity is 160, 124 adults and 36 children.

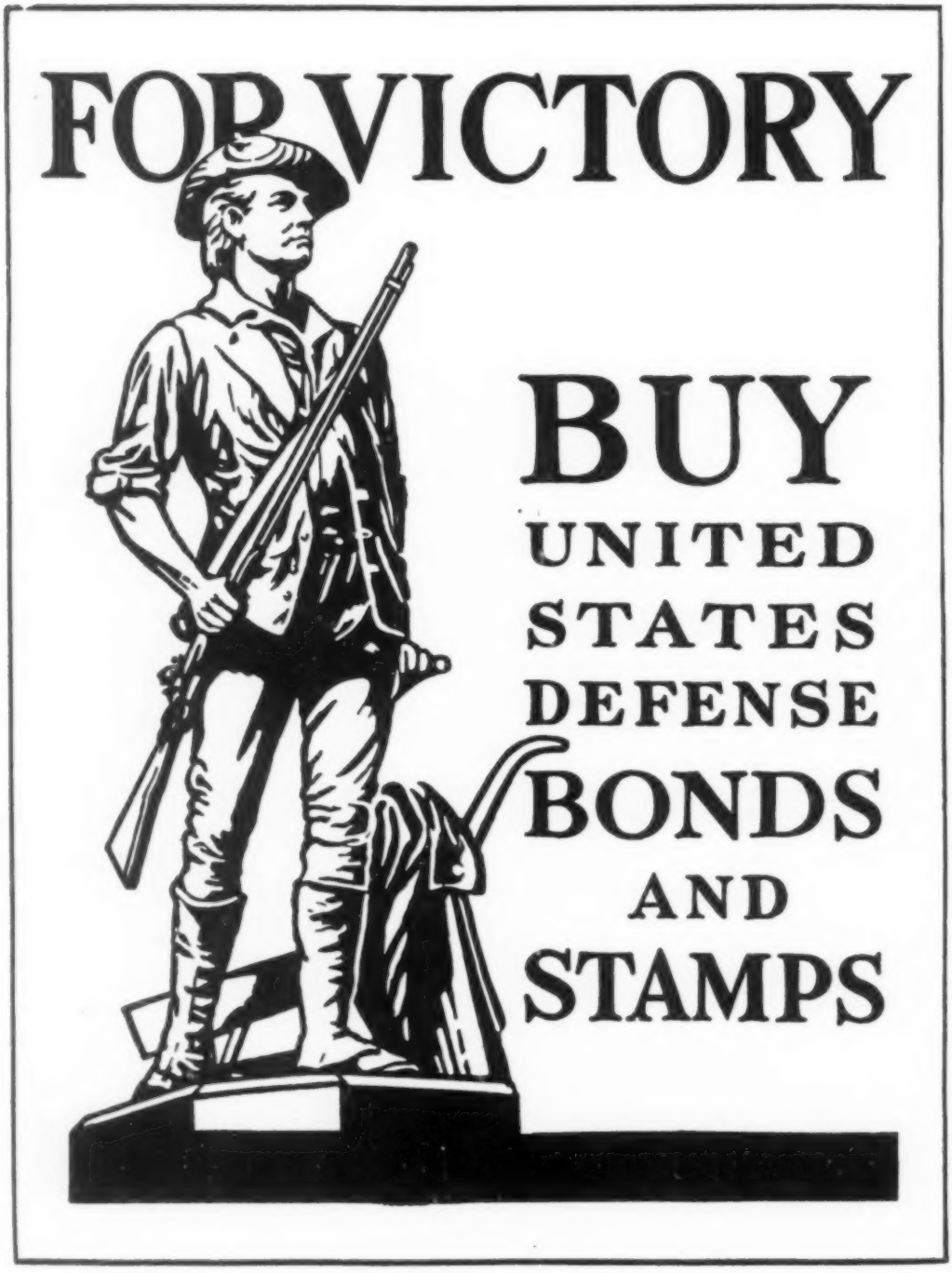
All forms of tuberculosis are admitted. An in-and-out-patient pneumothorax department is maintained at the sanatorium, while other operative procedures are done at the Memorial Hospital in Wilmington. Only bona fide state residents are admitted. Dr. L. D. Phillips is the Superintendent and Medical Director.



Edgewood Sanatorium

Marshallton, Delaware

Edgewood Sanatorium, located near Marshallton, Delaware, was the first sanatorium in the United States to be manned by an entirely Negro staff. It was made possible by the same untiring workers who were responsible for the establishment of Brandywine Sanatorium for white patients in Delaware. The question of the establishment of some care for the colored tuberculous in the state was first discussed in 1912, under the leadership of Miss Emily P. Bissell, President of the Delaware Anti-Tuberculosis Society. Among the other pioneers who assisted were John J. Black, M.D., Bishop Coleman, Mrs. Ferdinand Gilpin, Mrs. Jane Pennewill, A. Robin, M.D., Joseph P. Wales, M.D., Irvine M. Flinn, M.D., and Peter W. Tomlinson, M.D. In 1913, the State Legislature appropriated $10,000.00, with the provision that the Delaware Anti-Tuberculosis Society was to raise a like sum. This was accomplished, and in 1914 a unit was provided at Hope Farm (Brandywine Sanatorium) for colored patients. In 1915, the first Edgewood Sanatorium was opened. In the latter part of 1940 the new Edgewood Sanatorium, made possible by the appropriation of $150,000.00 by the State Legislature, was opened. It has a capacity of 68 (62 adults, 6 children). The Medical Director is Conwell Banton, M.D., and the Acting Superintendent is Miss Rachel B. Connor, R.N. The sanatorium is for bona fide state residents. All forms of tuberculosis are admitted. There is an in-and-out-patient pneumothorax department, while other forms of surgery are done at the Memorial Hospital, Wilmington, Delaware.


FOR VICTORY
BUY
UNITED
STATES
DEFENSE
BONDS
AND
STAMPS

VOL. VIII NOVEMBER, 1942 No. 11

DISEASES OF THE CHEST

MIDDLE ATLANTIC STATES ISSUE

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PENNSYLVANIA SECTION

Russell S. Anderson, M.D., Erie, Pennsylvania, *Chairman*

Pennsylvania—A Pioneer

RUSSELL S. ANDERSON, M.D.*

Erie, Pennsylvania

The year 1942 witnesses the accomplishment of fifty years of organized effort against tuberculosis in Pennsylvania. Much that our generation possesses in the way of resources designed to wage war against the ancient plague had its genesis in the Keystone State. One may go further and localize some of our beginnings in the venerable city of Philadelphia. Here were not only the cradle of American liberty and the seat of the first medical school in the land, but also the birthplace of organized opposition to the ravages of consumption.

Prior to fifty years ago, Pennsylvania shared the common lot and took tuberculosis as a matter of course. Koch's discovery of the tubercle bacillus had been known for ten years, yet impressive health measures to crystalize the import of his discovery had yet to appear. Practically nothing had been done by any agency, public or private, to either prevent the disease or to effectively treat those who had become its victims. Hospital facilities were almost negligible and preventive measures were simply an absent quantity. Despite the fact that tuberculosis was by far the leading cause of death at that time, official health boards paid virtually no attention to the problem; anti-tuberculous legislation was a rarity and only an occasional physician manifested noticeable interest in its presence. What was true of Pennsylvania up to that time had been equally true throughout the nation, with the possible exception of two or three localized communities.

Out of this void there arose in Philadelphia in the year 1892 an organization whose basic principles and early activities hade done much to point the way to a succeeding campaign against tuberculosis. In that year, a few physicians and forward-looking laymen, under the stimulation and guidance of the late Dr. Lawrence Flick of Philadelphia, organized the Pennsylvania Society for the Prevention of Tuberculosis. This organization, which in 1920 changed its name to the Pennsylvania Tuberculosis Society and which also observed its fiftieth anniversary in Philadelphia in June of this year, immediately set about the task of educating the medical and lay public as to the known truths of tuberculosis. This involved the preparation of vast amounts of printed matter and addresses to medical societies and lay organizations. Every effort was made to stimulate proper control legislation and to encourage the development of hospital facilities for the care of the tuberculous sick.

The young organization struggled along for eighteen years before its financial support began to grow appreciably. Nevertheless, it accomplished much with the meager tools at its disposal during the interim. One of its greatest achievements was an indirect one. Taking precedent from the result of Philadelphia and Pennsylvania's initiative, similar organizations began to appear elsewhere in the United States and throughout the civilized world. One of these was the National Tuberculosis Association, organized in 1904. Here, then, were the beginnings—and the accomplishments of these groups to date are too well known to need repetition here.

Pennsylvania was also a pioneer in the development of facilities required for the isolation and care of tuberculous patients. Again the name of Dr. Flick enters into the early picture, although his efforts were not the very first. In 1869 a valuable piece of property including a substantial dwelling or two, was offered in Chestnut Hill, Philadelphia, as a haven for those "afflicted with consumption." Legend has it that this novel idea was born of spite rather than charity and was intended to mar the tranquility of that staid, aristocratic and mid-Victorian suburb—mute evidence of the low regard held for tuberculosis at that time and the stigma placed on individuals suffering from the disease.

Whether this not too pretty tale is true, such an institution nevertheless actually developed on the premises. The Protestant Episcopal Mission of Philadelphia acquired the property and founded The Home for Consumptives some years later. This institution flourishes to this day and has in the years between offered sanctuary to thousands of hapless victims of tuberculosis.

Just prior to his successful contribution in the organization of the Pennsylvania Society for the Prevention of Tuberculosis, Dr. Flick succeeded in forming the Rush Hospital for Consumptives and Allied Diseases. This institution was opened in 1892. Two years later the Free Hospital for Poor Consumptives was founded at White Haven, and again the hand of Dr. Flick, together with the collaboration of the Reverend Father Scully, was responsible. As an outgrowth of this valuable undertaking, Dr. Flick became associated with the industrialist, Henry Phipps. Together in 1903 they founded the Henry Phipps Institute from whence so much of scientific achievement has come these many years.

It is of interest to note here that this long flourishing institution has not only done remarkable work among the poor of Philadelphia, but has produced some of the most outstanding clinicians and teachers in the tuberculosis field in this state. Very high on the list among these was the late Dr. H. R. M. Landis whose biography and achievements appear elsewhere.

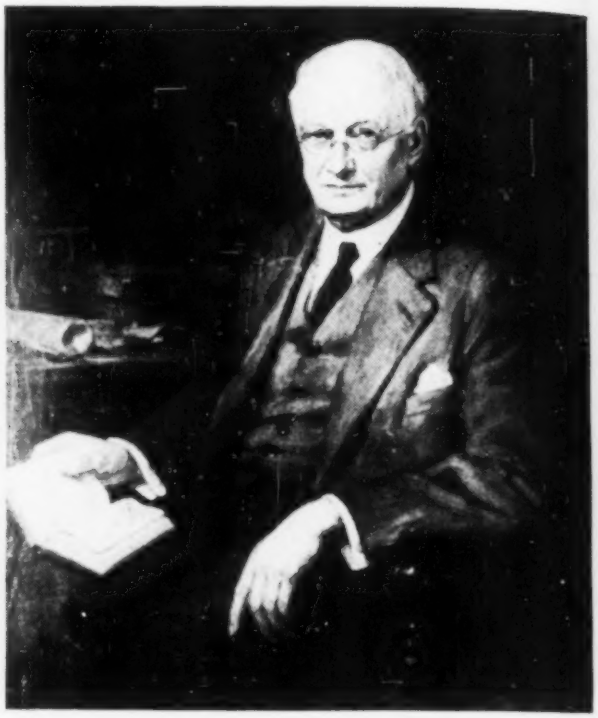
By this time it was apparent that the tuberculosis question burned most urgently in the homes of the poor. If a successful fight was ever to be waged against the disease, tax-supported institutions must be brought into the picture. The eminent champion and father of this cause was the late Secretary of State, Department of Health, Dr. Samuel G. Dixon. Largely through his efforts, the sanatorium known originally as South Mountain Camp Sanatorium, opened in 1902 at Mount Alto, became a state institution in 1907. This is

(Continued on page 360)

*Medical Director, Erie County Tuberculosis Hospital.

Tuberculosis Pioneers in Pennsylvania

Samuel Gibson Dixon, M.D.
Bryn Mawr, Pennsylvania
1851-1918
State Comissioner of Health, Pennsylvania, 1905 to 1918.



Lawrence F. Flick, M.D.
Philadelphia, Pennsylvania
1856-1938
Organizer and First President, Pennsylvania Tuberculosis Society.

Henry R. M. Landis, M.D.
Philadelphia, Pennsylvania
1897-1937
Director, Clinical and Sociological Department, Henry Phipps Institute.

William Devitt, M.D.
Allenwood, Pennsylvania
1874-
First President, Federation of American Sanatoria (1935-37) (now American College of Chest Physicians).

**Photographs of Drs. Dixon, Flick and Landis through the courtesy of the American College of Physicians.*

Officers of the College in Pennsylvania

Russell S. Anderson, M.D.

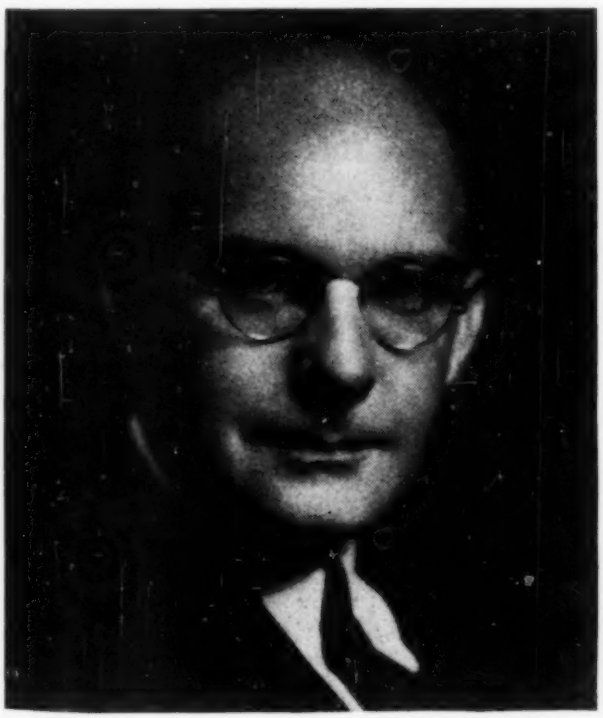
Erie, Pennsylvania

Chairman, Pennsylvania Section Middle Atlantic States Issue. President, Pennsylvania Chapter.

Frank Walton Burge, M.D.

Philadelphia, Pennsylvania

Chairman, Board of Regents (1938-42). Editor-in-Chief, DISEASES OF THE CHEST (1937-1941). Member, Editorial Board.



C. Howard Marcy, M.D.

Pittsburgh, Pennsylvania

Regent, American College of Chest Physicians, District No. 3.

John H. Bisbing, M.D.

Reading, Pennsylvania

Governor, American College of Chest Physicians, Pennsylvania.

Pennsylvania Sanatoria

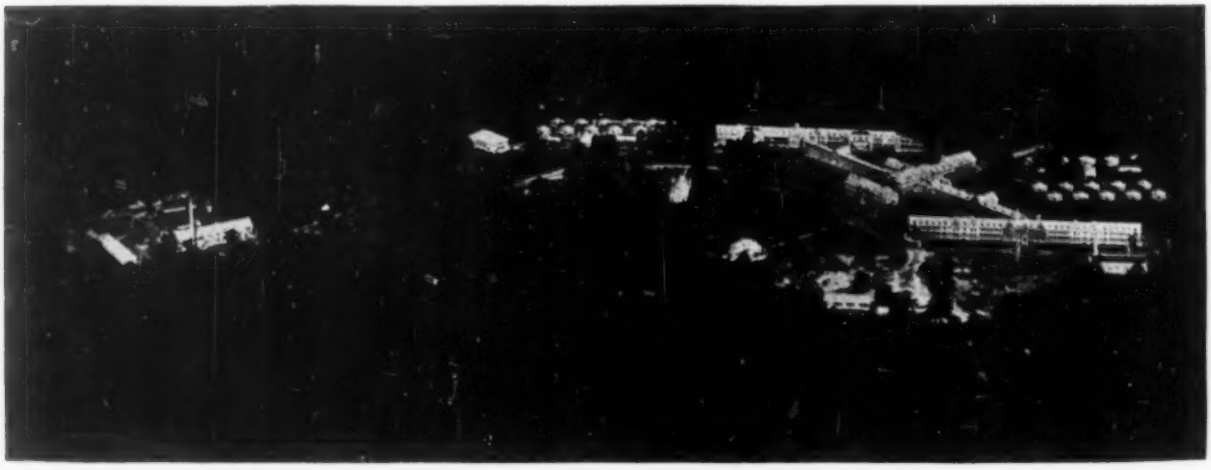
Pennsylvania State Sanatorium, No. 1

South Mountain, Pennsylvania

The Pennsylvania State Sanatorium for Tuberculosis No. 1 at South Mountain was founded in 1903. It is located in the center of a 55,000-acre state forest reservation in Franklin County, Pennsylvania, at an elevation of 1650 feet.

The main structures of this institution are the Adult Hospital Building, modern and completely equipped, with a capacity of 765 beds; the Children's Hospital, with a capacity of 330 beds for children between the ages of four and sixteen years.

In addition, there are four modern brick units with 49-bed capacity each for the care of ambulatory patients, and also 58 of the Samuel Dixon cottages, each accommodating eight patients, designed by Samuel G. Dixon, who organized and was first Commissioner of Health of Pennsylvania, making a total capacity for the institution of 1750 beds. Dr. C. C. Custer is the Medical Director.



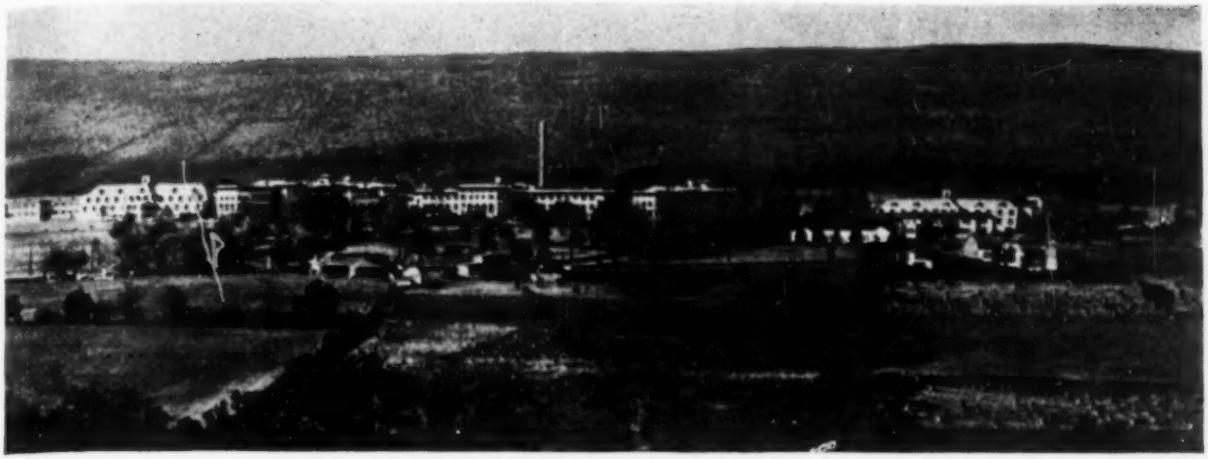
Pennsylvania State Sanatorium, No. 2

Cresson, Pennsylvania

Pennsylvania State Tuberculosis Sanatorium has 850 beds and was opened December, 1912. There is a special building for children which includes twenty-five beds for infants over eighteen months. Adult patients in all stages of pulmonary tuberculosis are admitted regardless of distinction of color or age. An addition now under construction will provide two modern operating rooms with necessary adjuncts and housing for twenty-four surgical patients. This building will probably be ready for occupancy in Autumn of 1942.

The sanatorium was built and is operated by the State Health Department and maintained entirely by state appropriation. There are no charges of any kind. Dr. Thomas H. A. Stites is the Medical Director.

Pennsylvania Sanatoria



Hamburg State Sanatorium

Hamburg, Berks County, Pennsylvania

In October, 1914, this institution, located on a tract of more than three hundred acres and with a capacity of 450 beds, received its first patients. The sanatorium is a complete unit, with power plant, water and sewage treatment plants, laundry, bakery and farm.

Admissions to date have totalled more than 20,000. In 1932, two units for ambulatory cases were constructed, adding 90 beds; four additional units with a combined capacity of 200 beds, as well as a nurses' home, were completed in 1938, and during the same year a complete surgical unit with 36 beds and two air-conditioned operating rooms was dedicated, since which time major chest surgery has been practiced. The present capacity is 776 beds. Dr. Henry A. Gorman is the Medical Director.

Eagleville Sanatorium

Eagleville, Pennsylvania

The Eagleville Sanatorium is situated in the beautiful Perkiomen Valley, twenty-three miles from Philadelphia and three miles northwest of Norristown. It is designed and equipped for the care of patients suffering from pulmonary tuberculosis, all forms. The capacity is 200. There is a modern fireproof hospital with complete operating facilities; eight cottages, a central dining hall and a central power plant, all equipped in the most modern fashion.

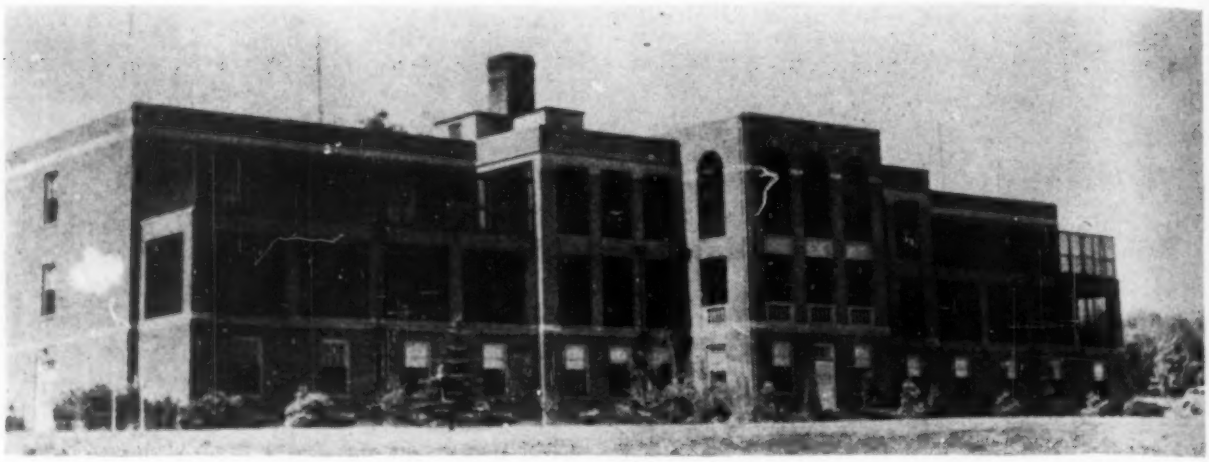
Arrangements can be made for the reception of patients in all economic levels. There are 150 free and part-pay beds, and 50 beds for private patients.

The dispensary, social service department and executive offices are located at 1332 Fitzwater Street, Philadelphia.

The medical staff includes recognized tuberculosis specialists in Philadelphia, who visit weekly, and some of the finest specialists in the collateral branches of medicine. There are two resident physicians and a corps of expert nurses. Sixty-five to seventy per cent receive some form of collapse therapy.

The institution is maintained by state aid, the Philadelphia Community Chest, board from patients and income from endowment funds. Dr. A. J. Cohen is the Medical Director.

Pennsylvania Sanatoria



Erie County Tuberculosis Hospital

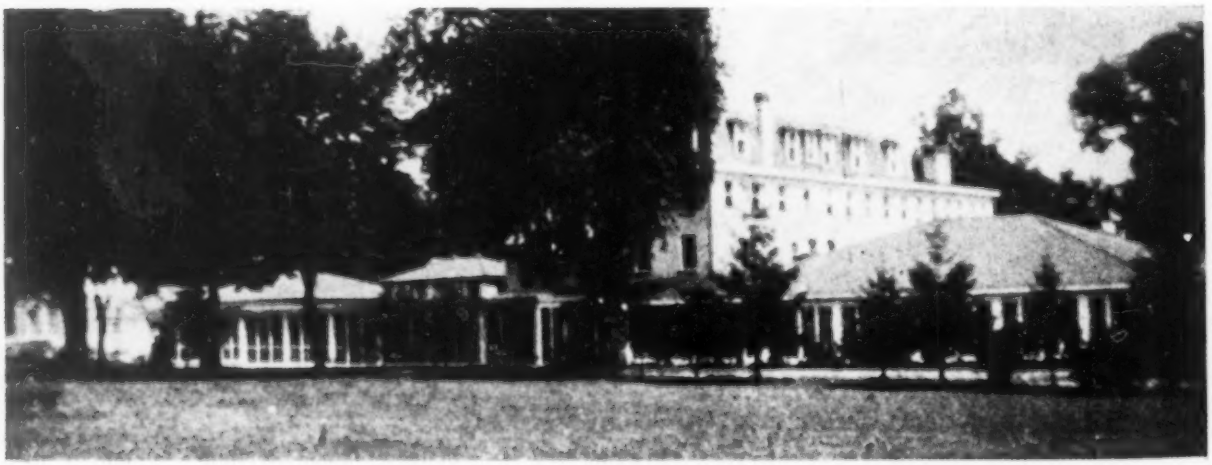
Erie, Pennsylvania

The Erie County Tuberculosis Hospital is a county institution, located immediately south of the City of Erie.

The first patient was admitted on January 25, 1938. There is a bed capacity of 65 of which nine are in private rooms and all but eight of the remainder in four-bed wards.

The Erie institution follows the principle of strict prolonged rest, supplemented by the intense use of collapse therapy in a very high percentage of cases. The clinical work is supported by the institution's own x-ray and clinical laboratories, and dental and dietetic departments.

Dr. R. S. Anderson has been the Superintendent and Medical Director since the hospital opened. There is a large consulting staff.

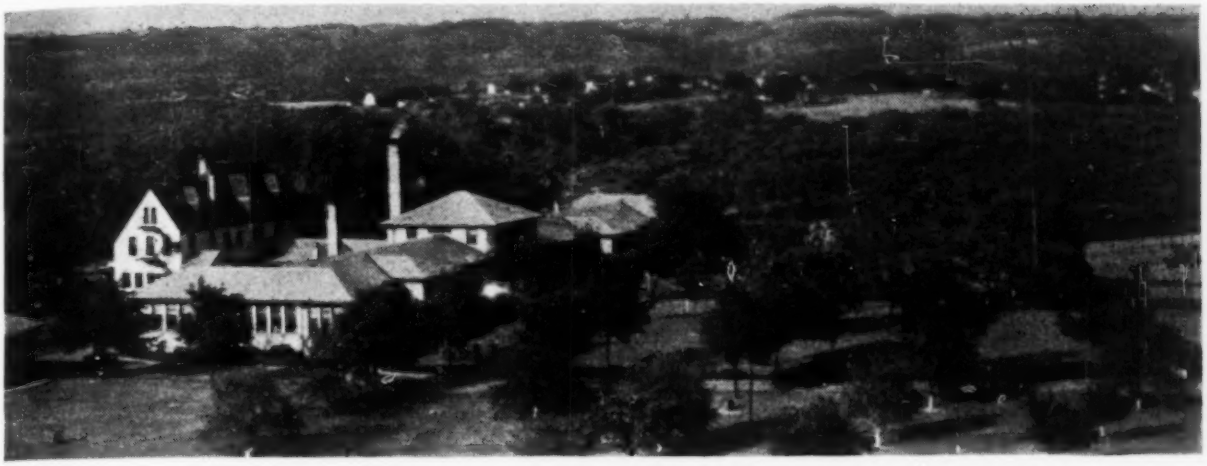


Rossmere Sanatorium

Lancaster, Pennsylvania

Rossmere Sanatorium was first opened in 1925. It is a semi-private sanatorium admitting all stages of tuberculosis in any form, limited to residents of the state. Diagnostic and treatment facilities are x-ray, pneumothorax; cases requiring thoracoplasty are transferred to local hospitals or to Pennsylvania Hospital and Jefferson Hospital in Philadelphia. Out-patient service provided by Tuberculosis Society of Lancaster County. Dr. Murray K. Spillman is the Medical Director.

Pennsylvania Sanatoria

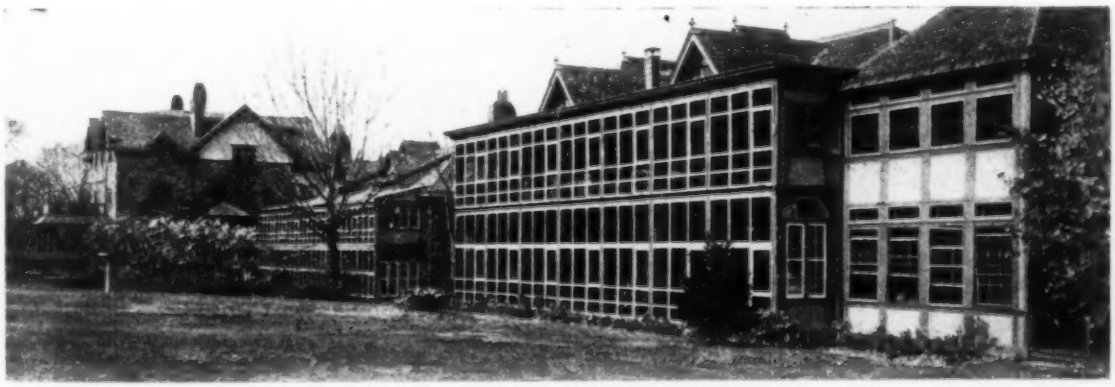


Beaver County Sanatorium

Monaca, Pennsylvania

Beaver County Sanatorium, Monaca, Pennsylvania, was opened in 1923, and houses sixty patients. Only pulmonary tuberculosis cases are admitted, in all stages of disease. All types of collapse therapy are used in treatment. Patients must be over sixteen years of age, residents of Beaver County for a year or more, of any race, religion or creed. First patient was admitted on February 8, 1924, and since then 1724 patients have been treated.

Margaret Boal, R.N., is the Superintendent and Dr. Ruth W. Wilson is the Medical Director.



The Home for Consumptives

Chestnut Hill, Pennsylvania

The Home for Consumptives is the oldest sanatorium for the treatment of tuberculosis in the United States.

The first patients were admitted in 1877, and it has been in continuous operation at its present location for the past sixty-five years.

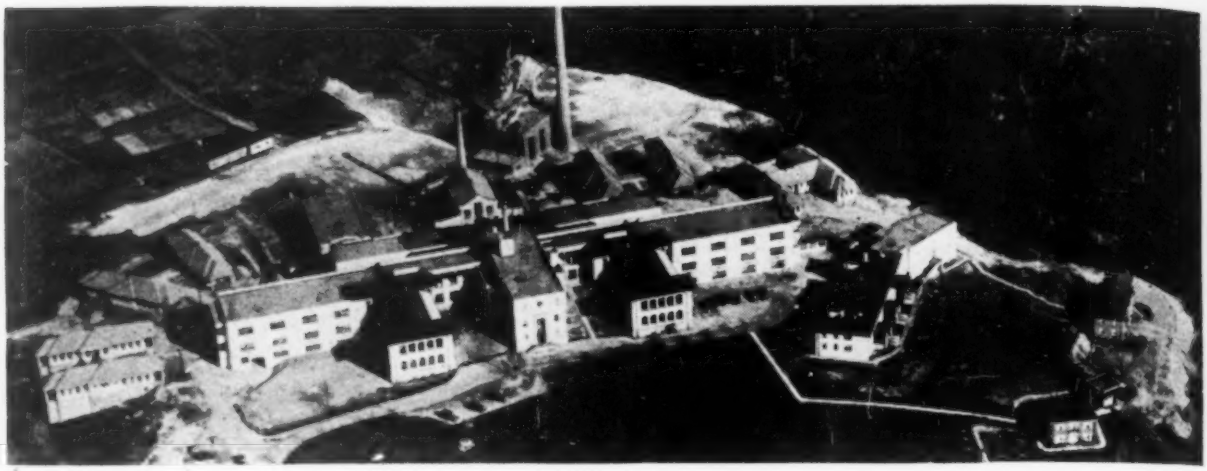
Patients are admitted in all stages of the disease.

All modern methods of treatment, including thoracic surgery, are employed by a complete staff of specialists.

The sanatorium is operated by the Episcopal City Mission of Philadelphia, but is non-sectarian regarding patients. The rates are very moderate.

For information concerning admission of patients address Episcopal City Mission, 225 South Third Street, Philadelphia, Pa.

Pennsylvania Sanatoria



Pittsburgh Tuberculosis Hospital

Pittsburgh, Pennsylvania

The Pittsburgh Tuberculosis Sanatorium was opened in September, 1915, with a capacity of 125 beds. Pittsburgh thus became the first city in the State of Pennsylvania to have its own hospital for the treatment of tuberculosis. It is situated on a plateau overlooking the Allegheny River.

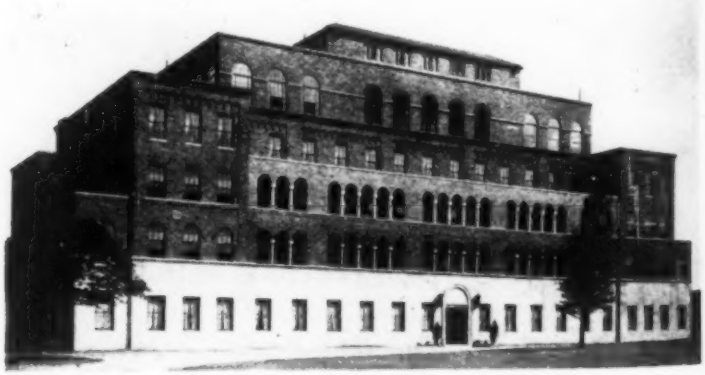
The sanatorium is equipped with a radio system consisting of a central station and individual ear phones at each bed. There is also a theatre with a seating capacity of 300.

The bed capacity has been increased and in 1939 was 460 beds. Obstetrical service has been added to the regular activities of the hospital and modern x-ray and operating rooms installed.

Dr. George E. Martin is the Superintendent of the Pittsburgh Tuberculosis Sanatorium and Dr. I. Hope Alexander is Director of the Department of Public Health.

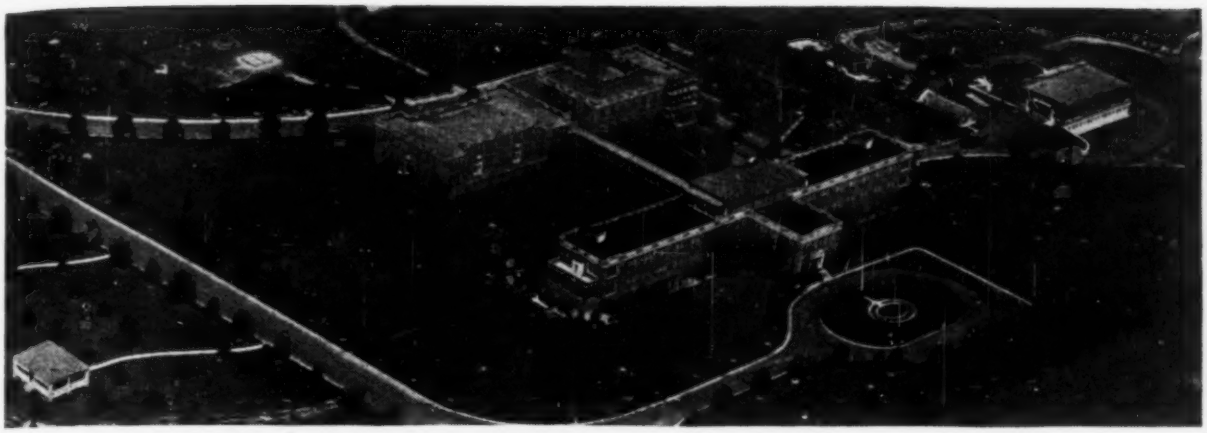
The Tuberculosis League Hospital

Pittsburgh, Pennsylvania



The Tuberculosis League Hospital, located 1100 feet above sea level, only one mile from the heart of a great industrial city, yet having spacious grounds, has an advantage unique in the field of tuberculosis prevention. Departing from the usual practice of establishing a base far distant from the source of patients, the League has developed an organization whose many ramifications are coordinated and guided from one point in the midst of a population of 1,500,000. The buildings are designed to make possible a complete diagnostic and treatment service for the 150 hospital patients and for the 6,000 patients who annually visit its out-patient department.

Pennsylvania Sanatoria



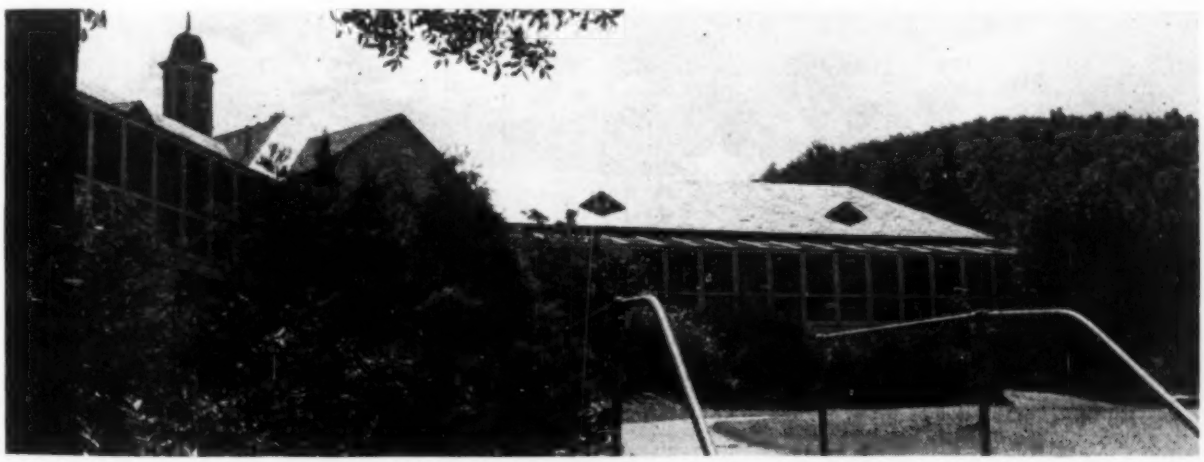
Berks County Tuberculosis Sanatorium

Reading, Pennsylvania

The Berks County Tuberculosis Sanatorium, located in Bern Township, six miles west of Reading, Pennsylvania, had as its beginning the Neversink Mountain Sanatorium founded in 1910. In 1932, following construction of a new modern hospital, the Neversink Sanatorium was abandoned and the new quarters occupied.

The sanatorium is supported entirely by county tax funds and admission of patients is limited to residents of Berks County in accordance with the legislation that governs operation of county sanatoria.

Equipped in the manner of a general hospital and with facilities for the accommodation of 138 patients, the Berks County Sanatorium is prepared to treat all forms of tuberculosis or its complications, either medical or surgical. Dr. John H. Bisbing is the Superintendent.



White Haven Sanatorium

White Haven, Pennsylvania

White Haven Sanatorium admitted its first patients at its present site in the Pocono Mountains (at White Haven, Pa.) in 1901. The sanatorium had been organized six years earlier by Lawrence F. Flick, M.D., one of the early pioneers in tuberculosis, who continued his association with the hospital staff until his death in 1937.

With a bed capacity of 240, facilities are available for 125 patients with private accommodations in single and two-bed rooms. Beds in community buildings are not available because of excessive demands.

The resident medical staff is under the direction of Christian W. Nissler, M.D.

The hospital facilities comprise the most modern and complete equipment for the treatment of tuberculosis combined with the services of a staff of consulting physicians and surgeons eminent in their respective specialties.

Harold T. Prentzel, Fellow of the American College of Hospital Administrators and President of the Hospital Association of Pennsylvania, is Administrator of the sanatorium. Competent specialists who have met the requirements of their fields supervise the x-ray, laboratory, dietary, nursing, pharmacy, farm, pasteurization, engineering and maintenance departments.

Tuberculous Tracheobronchitis*

LOUIS H. CLERF, M.D.
Philadelphia, Pennsylvania

Although the pathology of tuberculous tracheobronchitis was described about one century ago, its clinical importance was not recognized until the last decade. This recognition is in great part attributable to bronchoscopy. The remarkable progress made in the field of tuberculosis by this diagnostic aid during the past ten years has conclusively answered the query—is bronchoscopy indicated in tuberculosis?[1]

Tuberculous tracheobronchitis is a specific inflammation of the trachea or bronchi caused by the tubercle bacillus. It must not be confused with tracheobronchial tuberculosis, a term which should be used to denote tuberculosis of the tracheobronchial lymph nodes. While it has been classified variously, the simplest and probably the most practical classifications are those of Samson[2] and of Myerson.[3] These include the nonulcerative, nonstenotic or infiltrative lesions, the hyperplastic, granulomatous or tuberculomatous and ulcerative lesions often considered as ulcerogranulomatous, and represent different stages of the same process. The fibrostenotic group represents the results of healing. Two or more of these may be observed in the same patient.

Regarding the pathogenesis of these tuberculous lesions, considerable evidence has been produced to support the belief that they may occur by direct contact or implantation, by continuity, by contiguity, or by hematogenous infection. Myerson is of the opinion that the tuberculous infection progresses from the parenchyma of the lung by way of the smaller bronchi until it reaches a main bronchus. Auerbach[3] found involvement of the bronchi close to the cavities in over 90 per cent of the cases in which he performed autopsies. While a large number of the lesions found in the larger bronchi are seen to extend from the orifice of a bronchial subdivision, there are cases in which isolated lesions are observed in the trachea or in a main bronchus and in which no connection can be demonstrated with bronchial orifices. Obviously no one mode of infection can explain all of these cases. I believe, however, it can be accepted that tuberculous tracheobronchitis rarely is a primary disease, although there are observed instances in which it is impossible to demonstrate a parenchymal lesion. In such a case observed by me there was found an ulcerogranulomatous lesion in the left main bronchus with extension to both lobar bronchi. Repeated examinations of the chest both by physical examination and x-ray study failed to reveal any evidence of parenchymal disease and the patient ultimately made a complete recovery.

The occurrence of tuberculous tracheobronchitis does not serve as an index to the extent of pulmonary involvement. It may occur as a complication in cases of minimal as well as advanced disease. The findings at autopsy cannot be compared with the findings at bronchoscopy for all patients dying of pulmonary tuberculosis usually have advanced disease whereas patients examined bronchoscopically presumably still are in fairly good condition. There are a few statistical reports based on consecutive admissions which were studied bronchoscopically. Probably the best report on the general incidence is that of McIndoe and his associates[4] who did bronchoscopic studies on 272 patients as routine admissions. In this series they found 11 per cent of demonstrable tuberculous tracheobronchitis. Other series have been reported with usually a much higher incidence of tracheobronchial involvement, but these were not consecutive admissions. In the series of cases examined by me totaling 177 patients there were found 48 instances of demonstrable tuberculous lesions, a percentage of 27. In addition there were five patients in whom one could not be certain whether the bronchial lesions were tuberculous or of pyogenic origin. It is possible, therefore, that the rate was higher than 27 per cent. The reason for the high incidence in this group is that these patients were referred for bronchoscopy because there were evidences by physical signs, roentgen study or subjective symptoms which

*Read at meeting of New York State Chapter of American College of Chest Physicians held at New York City on January 23, 1942.

pointed to the probability of tuberculous tracheobronchitis.

It is of interest to note that this complication is more common in women than in men. In my group there were 33 females and 15 males. Various explanations have been offered. Also, it is more common in the left bronchus.

In general, the findings that would suggest the presence of tuberculous tracheobronchitis may be divided into subjective symptoms, certain physical signs, roentgen ray evidences and variations in sputum. The most common indication in my series was unexplained roentgen ray findings. The presence of positive sputum in an apparently controlled pulmonary lesion and variations in the quantity of sputum, also variations in the finding of tubercle bacilli often are explained by a tracheobronchial lesion. Wheezing respiration and irritative cough should always suggest the possibility of a tuberculous lesion.

It is often difficult to classify cases on the basis of the bronchoscopic findings, due to the co-existence of two or more lesions. In 7 patients the lesion was definitely submucosal and did not exhibit ulceration. It was observed that irritative cough is a common symptom in patients with submucosal infiltration. Granulomatous and ulcerative types frequently coexist as also do the ulcerative and the cicatricial. Ulcerogranulomatous cases numbered 23. There were 7 cases of ulcerogranulomatous lesions with cicatricial stenosis and 11 cases of cicatricial stenosis.

Discrete pedunculated granuloma may produce bronchial obstruction with retention of secretions and drowned lung. One such case was observed. The patient, aged 28 years, had pulmonary tuberculosis for two years. Beginning several months prior to bronchoscopic examination there were periods of fever with chills, cough, a peculiar strangling sensation followed by discharge of a large quantity of pus. The cough at times exhibited a curious whistling sound. Following an episode of cough and evacuation of pus the temperature would return to normal. At bronchoscopy, there was found a large pedunculated granulomatous mass occluding the right bronchus beyond the orifice of the upper lobe bronchus. This was removed bronchoscopically with striking changes in the patient's general condition, physical signs and roentgen findings. Iodized oil was later instilled into the right bronchus and a saccular bronchiectasis was demonstrated. This patient ultimately was treated by thoracoplasty with a very satisfactory result.

Wheezing respiration and cough are commonly observed in partial bronchial obstruction. The following case is illustrative: Male, age 32 years, developed wheezing and persistent cough following a cold. Repeated studies of the chest and sputum were negative for tuberculosis. At bronchoscopy there was found an extensive granulomatous lesion involving the left main bronchus and extending to the orifices of both upper and lower lobe bronchi. Secretions and tissue removed were positive for tuberculosis. The patient was again studied roentgenologically, making films at the end of inspiration and expiration and marked obstructive emphysema was found. He was placed on an anti-tuberculous regimen and ultimately made a satisfactory recovery. At no time could there be demonstrated any evidences of parenchymal tuberculosis. This case demonstrated the possibility of a primary focus in the larger bronchi. The case also demonstrates that spontaneous recovery is possible without any form of endobronchial treatment.

Although commonly observed in the adult form of tuberculosis, granulomatous lesions may be observed in the young. While these commonly represent the intrusion of a tuberculous lymph node into the bronchus there are occasionally observed cases in which this has not occurred. The following case is illustrative: A child, age 10 months, who had been treated for bronchial asthma, was finally examined bronchoscopically to explain a marked obstructive emphysema of the lung. At bronchoscopy there was found a small granuloma in the right bronchus which was removed and proved to be tuberculous.

It is important to bear in mind that the bronchoscopist can see only the proximal end of the lesion in a case of stenosis of a bronchus. He cannot give an opinion concerning the mucosa beyond the point of stenosis. It is probable that ulceration may persist particularly in those cases where tubercle bacilli still are found in the bronchoscopically removed secretions or in the sputum. In addition a number of cases of cicatricial stenosis

ultimately develop bronchiectasis. The amount of retention of secretion depends upon the degree of stenosis. In two cases there was observed complete stenosis or obliteration of a bronchus; in one the orifice of the middle lobe bronchus was obliterated and in the other the right bronchus immediately beyond the upper lobe bronchial orifice was atresic. The lung beyond the point of stenosis was airless and at no time could there be found any communication at the point of stenosis.

In the differential diagnosis it is necessary to consider other forms of ulceration. Carcinoma and tuberculosis may be found to coexist. In the presence of a positive sputum and a characteristic tuberculous lesion diagnosis usually is not difficult. While the objections to biopsy of a tuberculous lesion may in part be theoretical, it probably is safer not to resort to this procedure unless the appearances of the lesion are more suggestive of new growth than of tuberculosis. In the early days of bronchoscopy when our knowledge of tuberculous tracheobronchitis was meager, biopsy was performed more often. I cannot recall a single instance in which there were any untoward effects. In spite of this, however, I do not believe that it should be performed unless the indications are well defined.

Treatment—There appears to be considerable difference of opinion regarding the plan of treatment to be employed endobronchially in tuberculous tracheobronchitis. This is in great part due to the recent acquisition of our knowledge concerning this condition and also that inadequate time has elapsed to permit arriving at final conclusions. There still is difference of opinion regarding the treatment of tuberculous laryngitis. There are those who believe that treatment of infiltrating and ulcerogranulomatous lesions is of no avail since the disease either will progress or recover spontaneously without endobronchial manipulations. Irradiation therapy has been recommended with variable results. Kernan[5] has employed ultraviolet lamp therapy to the nonulcerative, infiltrating lesions and is of the opinion that it exerts a beneficial effect.

Ulcers are commonly treated by some form of cauterization. Silver nitrate seems to be more generally employed and is used in variable strengths from 5 to 25 per cent. There is difference of opinion regarding the desirability of using strong solutions because of subsequent cicatrization. Electrosurgical cauterization and electrocoagulation have been employed. The results reported, too, are variable. The use of a 5 per cent silver nitrate to ulcers has probably given better results in my cases than any other form of treatment. A number of cases were treated by electrocoagulation and in instances satisfactory results were secured, but in an equally large number these could not be corroborated. I believe it is important to make very superficial applications so that the underlying tissues are not injured. I do not favor extensive cauterization as I believe it increases scarring and it is questionable whether it will materially alter the progression of the lesion.

I still believe that the important consideration in the treatment of tuberculous tracheobronchitis is dependence on systemic measures together with collapse therapy if there is little or no obstruction. Mechanical removal of granuloma is inadvisable unless the lesion is more or less pedunculated and single. This was practiced in one case with a satisfactory result.

Cicatricial stenosis of the bronchus is exceedingly difficult to treat and each case must be considered individually. This is particularly true if the cicatricial process involves the entire circumference of the bronchus. These patients frequently present problems that have to do with retention of pus, fever, chills, etc. As is the case with all forms of cicatricial stenosis of the bronchus, dilatation by bouginage gives but temporary relief. There are times when this is nevertheless desirable in order to improve drainage. I have treated four cases of cicatricial stenosis of marked degree by bouginage. In two the benefits were temporary in that ultimately the patients developed persistent fever with extensive suppuration beyond the point of stenosis and it was necessary to carry out some other plan of therapy. In both of these, pneumonectomy was successfully performed. In a third cases, dilatation was carried out for a time but the patient became discouraged and the procedure was discontinued (Fig. 1). In a fourth case, still under treatment, there is marked stenosis of the left main bronchus, the lumen of which is not more than 3 or 4 millimeters in diameter. The lumen is ringed

with small granulations and after three or four weeks these become almost completely obstructive with retention of a large quantity of pus beyond the point of stenosis. If the patient is treated every three or four weeks, she continues afebrile and appears to be in very satisfactory condition. It is very probable, however, that ultimately it will be necessary to resort to some other form of procedure, preferably pneumonectomy.

Kernan[5] has employed a copper bougie electrode for ionization and believes that this aids in dilatation of the stenosis. Not all cases of stenosis require treatment. The determining factor is whether or not there is retention of secretions with suppuration distal to the point of narrowing. I have under observation four cases with stenosis of the bronchus in whom there is no retention of secretions and the patients are relatively comfortable. One cannot, of course, determine when there will be an increase in the narrowing of the existing stenosis with infection beyond (Fig. 2). Complete occlusion of the bronchus would be desirable. Two patients with this condition have been observed and they are free from symptoms. At the request of Dr. A. J. Cohen and Dr. George Willauer, I attempted to produce stenosis of the bronchus in four patients following thoracoplasty with a view of producing atresia of the bronchus. Acid acriflavine solution was employed. In three instances the results were very satisfactory but in the fourth case there occurred a serious infection beyond the point of stenosis and the patient developed a marked bronchiectasis, expectorated enormous quantities of pus and entered into a state of chronic invalidism. Following this I discontinued the procedure as I do not believe it is entirely free from danger. I believe, therefore, that simple dilatation and bronchoscopic aspiration of secretions beyond the point of stenosis is indicated in those who have suppuration. The employment of salt solution containing ephedrine sulphate may be instilled beyond the point of stenosis to aid in getting rid of secretions and shrinking the mucosa. I have not employed other forms of medication. I

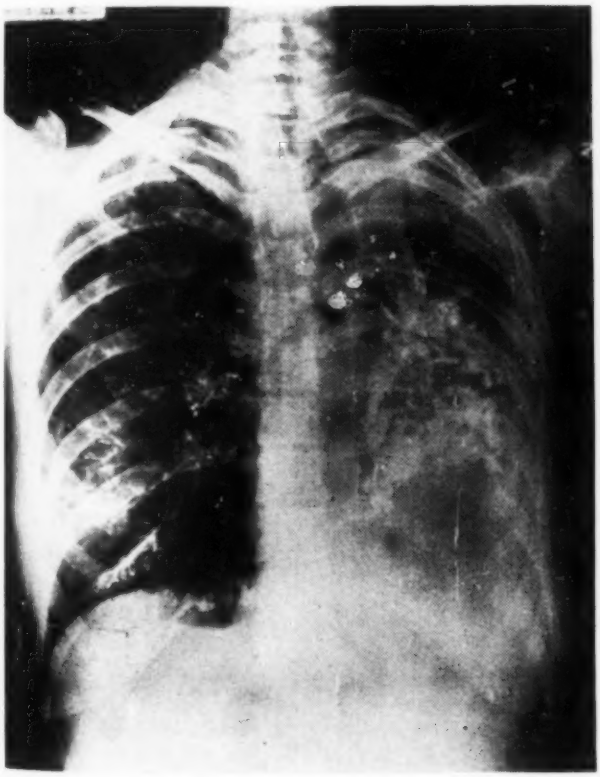


Fig. 1. Roentgenogram of chest of a woman, aged 36 years, who has pulmonary tuberculosis with cicatricial stenosis of the left main bronchus, collapse of left lung with retraction of trachea to left and evidences of bronchiectasis of lung. Bronchoscopic dilation of the stricture and aspiration of pus gave temporary benefit but the patient did not wish to continue treatment. With irregular fever, sweats, pain in left chest and increasing dyspnea the prognosis is unfavorable.

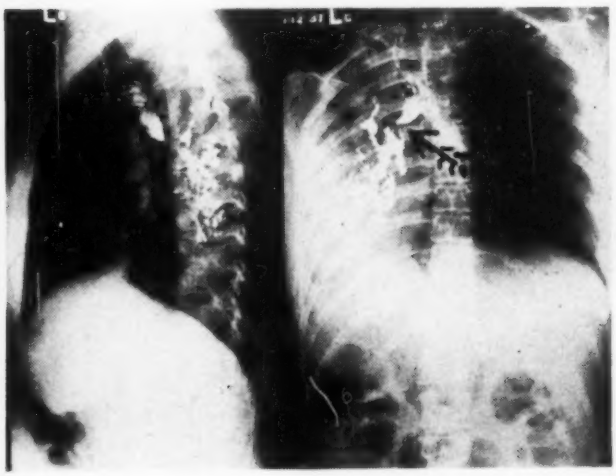


Fig. 2. Roentgenogram of chest made after instillation of iodized oil in left bronchus of a woman, aged 27 years, revealed marked narrowing of left main bronchus (shown by arrow) with bronchiectasis of many subdivisions beyond the point of stenosis. The stenotic lumen is about 3 millimeters in diameter and resists dilation. There is practically no retention of secretion beyond the stricture except following acute respiratory infections. The sputum now is free from tubercle bacilli and she is symptom-free except for episodes of fever and chilliness with purulent sputum and evidences of retention of secretion with each respiratory infection. These respond promptly to bronchoscopy. The ultimate prognosis is unfavorable.

am of the opinion that pneumonectomy or lobectomy as required should be considered in these cases if suppuration is present, as the ultimate prognosis is grave.

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Annual Meeting—Pennsylvania Chapter

The Second Annual Meeting of the Pennsylvania Chapter of the American College of Chest Physicians was held at the William Penn Hotel, Pittsburgh, on October 4-5. The annual banquet of the Chapter was held on Sunday night, October 4th, the evening prior to the opening day of the Ninety-second Annual Session of the Medical Society of the State of Pennsylvania. Dr. J. Winthrop Peabody, Washington, D. C., president of the College, was the guest speaker at the banquet. Dr. Peabody discussed the rapid growth of the College and the added responsibilities of our members under war conditions.

On Monday morning, October 5th, an interesting scientific program was presented. "The Treatment of Pulmonary Tuberculosis in the Rejected Draftee" by Dr. C. Howard Marcy, Pittsburgh, brought forth a lively discussion. Dr. Marcy's presentation was very timely and appropos of present conditions. Dr. Louis Cohen, Philadelphia, presented an interesting talk, illustrated with lantern slides, on "Fluoroscopic Guidance in the Treatment of Thoracic Diseases." The program closed with "Information Please" and many interesting questions were presented and discussed.

The following officers were elected for the ensuing year: Dr. Royal H. McCutcheon, Bethlehem, president; Dr. John S. Packard, Allenwood, vice-president; and Dr. Edward Lebovitz, Pittsburgh, was reelected secretary-treasurer.

The members of the Pennsylvania Chapter of the College extend a vote of thanks to Dr. Russell S. Anderson, Erie, the retiring president. Dr. Anderson has successfully conducted the affairs of the Chapter since its inception.

PENNSYLVANIA—A PIONEER

(Continued from page 347)

now one of the largest sanatoria in the world. In 1912 the state opened Cresson State Sanatorium for Tuberculosis and two years later the Hamburg State Sanatorium. In 1938 a fourth sanatorium for the tuberculous was erected in the western end of the state at Butler. However, this institution has never been opened for that purpose despite waiting lists and a high residual tuberculous population throughout the state.

For many years a system of State Tuberculosis Clinics has thrived throughout the state and in 1939 state-controlled pneumothorax centers were established at strategic points. This work of inestimable value is under the able direction of Major General C. R. Reynolds, former Surgeon General of the United States Army.

Today, Pennsylvania has many county and local organizations actively engaged in the coordinated fight against tuberculosis. There are now some eighteen institutions devoting their more than 6000 adult beds to the treatment of tuberculosis. Some of the best known of these, besides the sanatoria mentioned above, are the Tuberculosis League Hospital of Pittsburgh, the Eagleville Sanatorium of Eagleville, Pa., and Devitts Camp at Allenwood, Pa., established by our former president, Dr. William Devitt. There are also included some excellent county institutions.

Regardless of her long experience in developing organizations and institutions to combat tuberculosis, the set-up here as elsewhere is not perfect. There is yet much that can be done to refine and coordinate our several efforts. Into the picture has come as recently as 1941 the Pennsylvania Chapter of the American College of Chest Physicians. It is the writer's modest hope that this newly created group will help prove the faith of its predecessors in bringing about better and brighter days to the Commonwealth.

VOL. VIII NOVEMBER, 1942 No. 11

DISEASES OF THE CHEST

MIDDLE ATLANTIC STATES ISSUE

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NEW JERSEY SECTION

Joseph R. Morrow, M.D., Ridgewood, New Jersey, *Chairman*

The Tuberculosis Movement in New Jersey

ERNEST D. EASTON*

When the New Jersey Tuberculosis League came into existence in 1906 there were already four local committees functioning in a small way. By 1907, however, there were twenty-one local committees, and there is now an affiliated organization in every county. From the inception of the movement the volunteer associations have concentrated their efforts on educational programs. Other services, when undertaken, have been in the nature of demonstrations with the frank intention of securing official funds for their maintenance as soon as the experimental stage of the project was passed and its effectiveness shown. The consequence is that the clinic, nursing, sanatorium, and health education services now available throughout New Jersey are largely supported by state, county, and municipal appropriations.

As a result of the tuberculosis program in the state, facilities have been extended each year until they now directly serve nearly a half million. In the number in 1940 were included:

42,782 different persons attending clinics
52,536 persons examined through adult mass surveys
6,783 persons treated in sanatoria
250,000 students, teachers and employees examined in schools
46,000 draftees x-rayed in induction centers

Cooperating Agencies

Clinics and nursing services are operated under joint auspices of sanatoria, health departments, tuberculosis associations, general hospitals, county freeholders, Red Cross chapters and industrial plants. Sanatoria, general hospitals and Boards of Health serve as centers for 96 clinic services.

Mass Surveys

More than a quarter of a million students and teachers were included in the extensive tuberculin testing and x-raying examination now required by law of New Jersey's high school students, teachers and employees. The exigencies of such an immense program accelerated establishment of examinations for industrial workers, National Youth trainees and selective service men, while increased emphasis was placed on relief, WPA, Negro and other low income groups as case sources.

During 1940, the clinics extended their extra-curricular activities to include 10,829 adult persons examined in mass surveys. Mobile units furnished by county sanatoria or commercial firms were chiefly employed in the surveys, although, in some instances examinations were made at sanatoria or other well-equipped central points. A significant development was the mobilization of the state's facilities for examination of selective service enrollees. This was made possible through cooperation of the Tuberculosis Committee of the State Medical Society, draft boards, and the U. S. Army. With the cooperation of clinicians and sanatoria, four induction stations were equipped with portable units staffed by clinicians, technicians, and nurses. Consultation facilities and x-ray examinations were also made available to local draft boards in a number of counties. The chest x-ray is now a routine part of Army and Navy examinations.

The Problem of the Negro

Negroes are a little more than five per cent of the state's population, but contribute more than one fourth of the tuberculosis deaths. The Negro death rate was reduced by 28 per cent during the last decade. Negro Advisory Committees have been formed in a number of the counties. There have been numerous Negro Health Week observances followed by efforts to maintain all year round Negro health education programs. Negro physicians and nurses have been added to clinic personnel. Special institutes and training courses were organized for physicians. There have been a number of mass surveys of Negro groups undertaken, and the health message has been carried by meetings and motion pictures from the church and lodge hall to the pool room and neighborhood barber shop. A full-time Negro consultant, Dr. J. Earle Stuart, is now on the staff of the State Health Department and Dr. W. G. Alexander, the League's Negro Advisory Committee Chairman, has been appointed a member of the State Board of Health.

Sanatorium Facilities

The State of New Jersey, eleven of its counties and one municipality maintain sanatoria for the care of their tuberculosis patients. The other ten counties send their patients to the State Sanatorium at Glen Gardner and to private and other public institutions authorized to accept patients at state and county expense. These institutions provide 3644 beds for tuberculous adults and children.

Post Sanatorium Care and Adjustment

The recent passage of the Artaserse Bill and the cooperative agreement made between the New Jersey State Rehabilitation Commission and the New Jersey Tuberculosis League constitute practical progress toward development of the all-inclusive, coordinated program of post sanatorium care and adjustment which the League is endeavoring to create.

Outbreak of hostilities at Pearl Harbor found the Tuberculosis League firmly established with offices in every county closely linked to the clearing center in Newark. Close relationship with state departments and cooperating agencies make possible utilization of this machinery for war time emergencies. More than forty organizations cooperated in planning for a meeting in Newark on April 10 for discussion of "Health in War Times and After."

Success of the program for tuberculosis control employed during the depression years gives encouragement to hope that the threat of increased disease presented by our entry into the second World War will be overcome by prompt and efficient employment of the measures available.

*Executive Secretary, New Jersey Tuberculosis League.

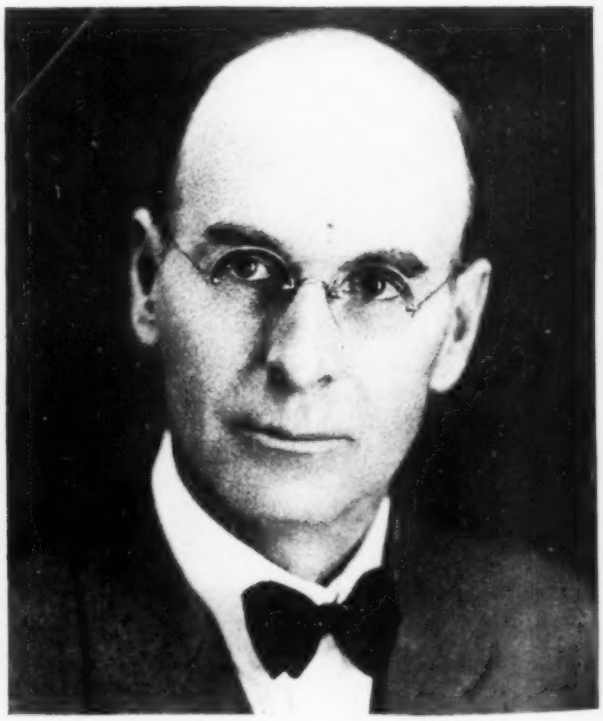
Tuberculosis Pioneers in New Jersey

Berthold Steinbach Pollock, M.D.
Jersey City, New Jersey
Medical Director, Hudson County Tuberculosis Hospital.

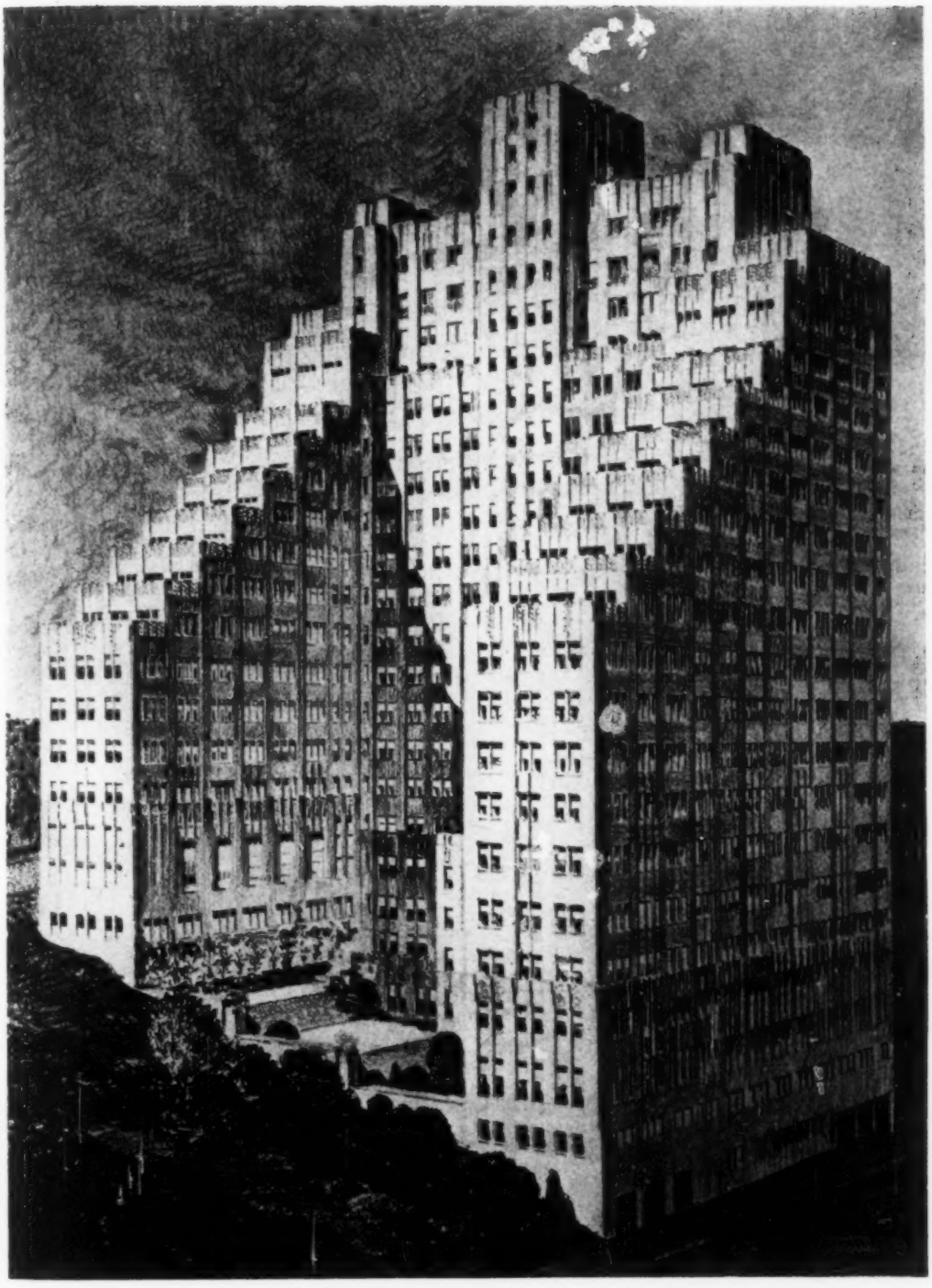
Samuel B. English, M.D.
Glen Gardner, New Jersey
Medical Director, New Jersey Sanatorium for Tuberculous Diseases.

Officers of the College

Joseph R. Morrow, M.D.
Ridgewood, New Jersey
Chairman, New Jersey Section Middle Atlantic States issue. President, New Jersey Chapter.



Marcus W. Newcomb, M.D.
Browns Mills, New Jersey
Governor, American College of Chest Physicians, New Jersey.



Hudson County Tuberculosis Hospital

Jersey City, New Jersey

The hospital accommodates all types of tuberculosis. Bed capacity is 510, which can be increased, if necessary, to 675.

This hospital houses the central clinic of the Hudson County Tuberculosis Clinic

The various departments are in charge of physicians who are specialists in their representative branches.

The surgical division contains fifty beds and occupies the 14th and 15th floors of the institution. Dr. B. S. Pollak is the medical Director.

New Jersey Sanatoria

New Jersey State Sanatorium

Glen Gardner, New Jersey

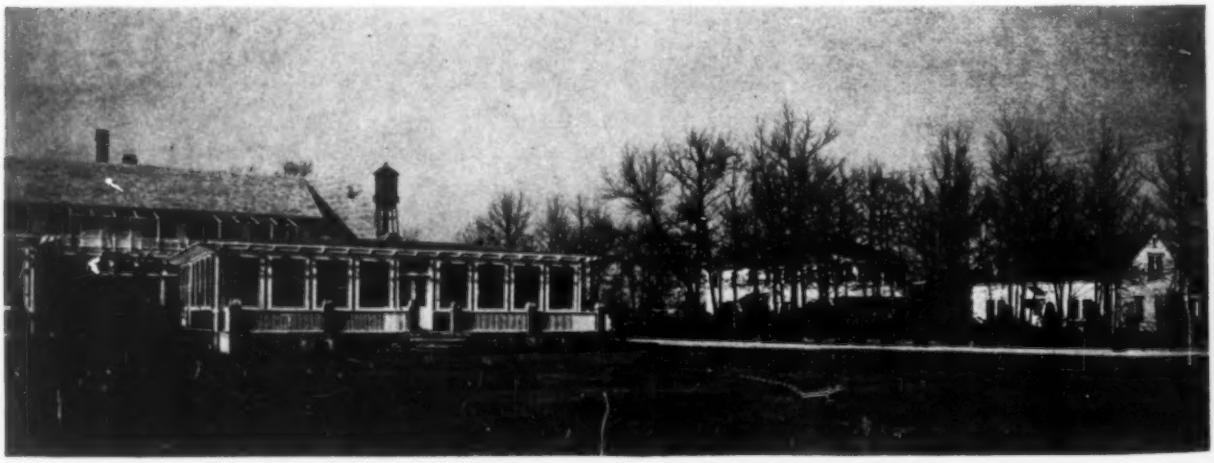
This sanatorium was opened in 1907. The patient capacity has grown from 105 to about 500.

The institution has its own farm and dairy and is also provided with its own water and sewage plants.

The surgical department was added in 1938 and approximately 80 per cent of the patients are receiving some type of collapse therapy.

The out-patient department is giving assistance to the rural sections where tuberculosis activities under local supervision is not well cared for. At the present time there are two traveling clinicians who hold about fifty clinics monthly and see from 12,000 to 15,000 patients annually. These clinicians offer consultation for the local practitioner, easy means of admission to the institution for the patient and care and advice for the ex-patient.

Dr. Samuel B. English has been Medical Director of the sanatorium since 1907.



Allenwood Sanatorium

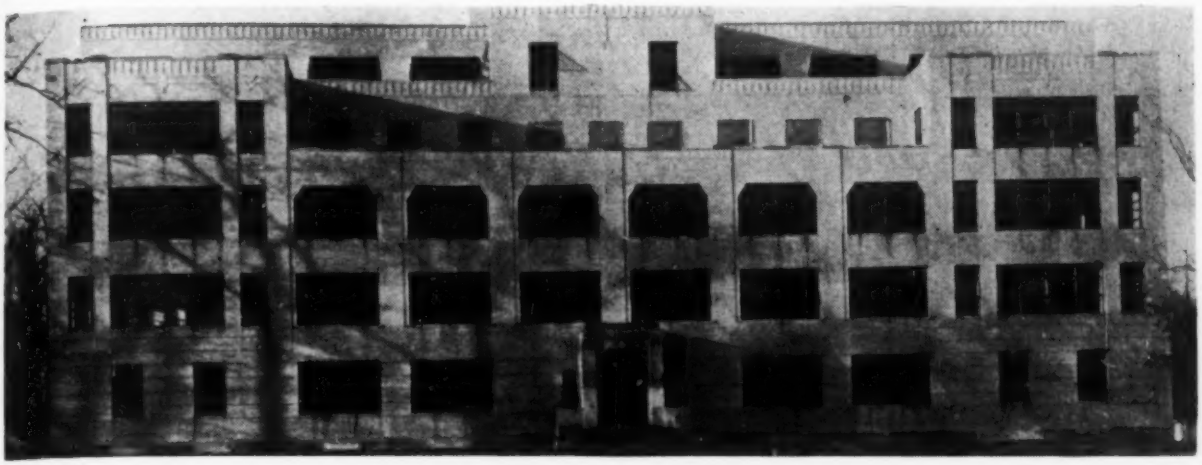
Allenwood, New Jersey

Allenwood Sanatorium, the Monmouth County Tuberculosis Hospital, was established in 1921, and is situated near Farmingdale, New Jersey. It has grown steadily to meet increased needs and now has eight buildings and 100 beds.

During 1941, care was provided 222 bed patients. A summary of the clinic work shows that in this year 1563 x-rays were taken; 640 pneumothorax cases treated with 2517 treatments given, and 2688 fluoroscopic examinations performed.

Miss Elizabeth Hynes, R.N., is Superintendent, and Dr. Frank J. Altschul, Medical Director.

New Jersey Sanatoria



Deborah Sanatorium

Browns Mills, New Jersey

Deborah Sanatorium is a five-story, steel and concrete constructed fireproof building, capable of housing 77 patients.

The ground floor consists of offices, laboratory, x-ray room, dining room for patients, dining room for staff, and a kitchen; the second floor of male wards with the capacity of thirty-two beds; the third floor of female wards with the capacity of forty-five beds.

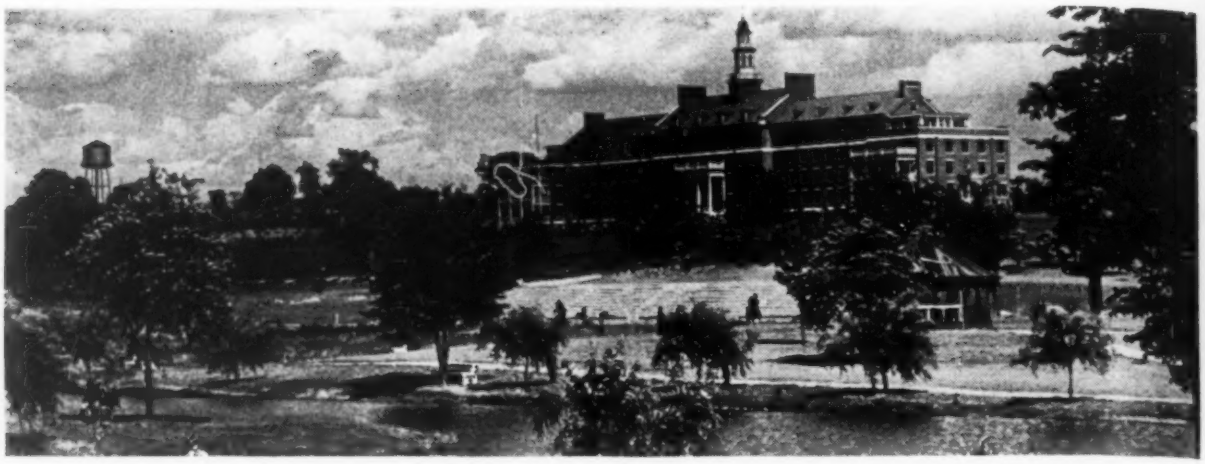
An addition on the fourth floor will accommodate forty-five more patients. The fifth floor is to have an operating room and solarium. Dr. H. Barenblatt is the Medical Superintendent.

Lakeland Sanatorium

Grenloch, New Jersey

Lakeland Sanatorium was opened in 1925 for all stages of tuberculosis, pnoumonoconiosis. Children admitted in separate building. Negroes are also admitted. The capacity of the sanatorium is 232. Diagnostic and treatment facilities available are x-ray, pneumothorax, bronchoscopy, thoracoplasty and all surgical procedures. Outpatient service is available for follow-up and pneumothorax refills. Dr. Martin H. Collier is the Superintendent.

New Jersey Sanatoria



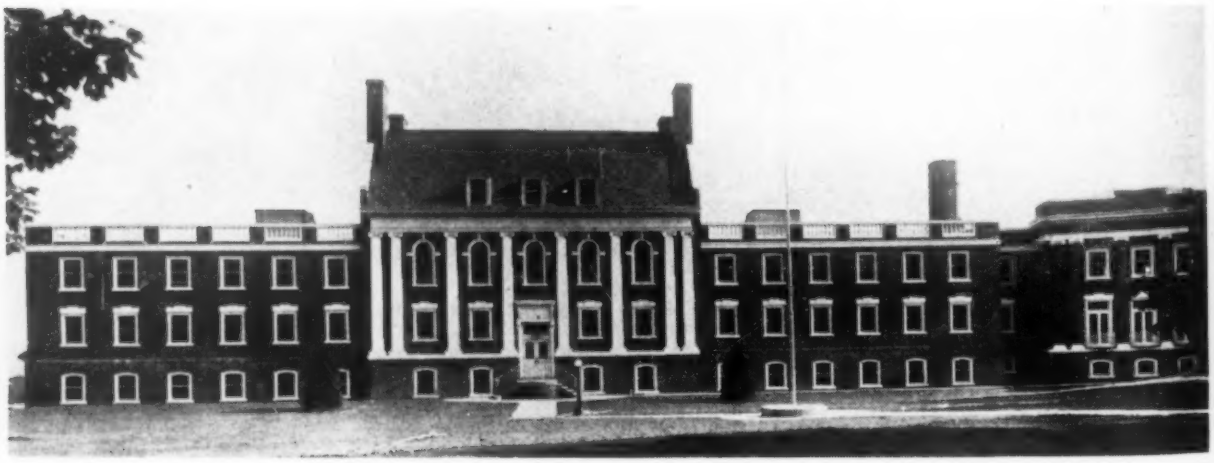
Roosevelt Hospital

Metuchen, New Jersey

The Roosevelt Hospital, Middlesex County Sanatorium, was opened on March 8, 1937, and since then has hospitalized a total of 1597 patients. In addition to caring for resident patients, it maintains an out-patient department for x-raying and examining out-patients referred by private physicians.

All types of collapse therapy are given at the institution. The necessary surgery is performed by a visiting surgical staff.

The institution is headed by its superintendent and medical director and board of managers who are responsible to the Middlesex County Board of Chosen Freeholders. Dr. Joseph A. Smith is Acting Superintendent and Medical Director.

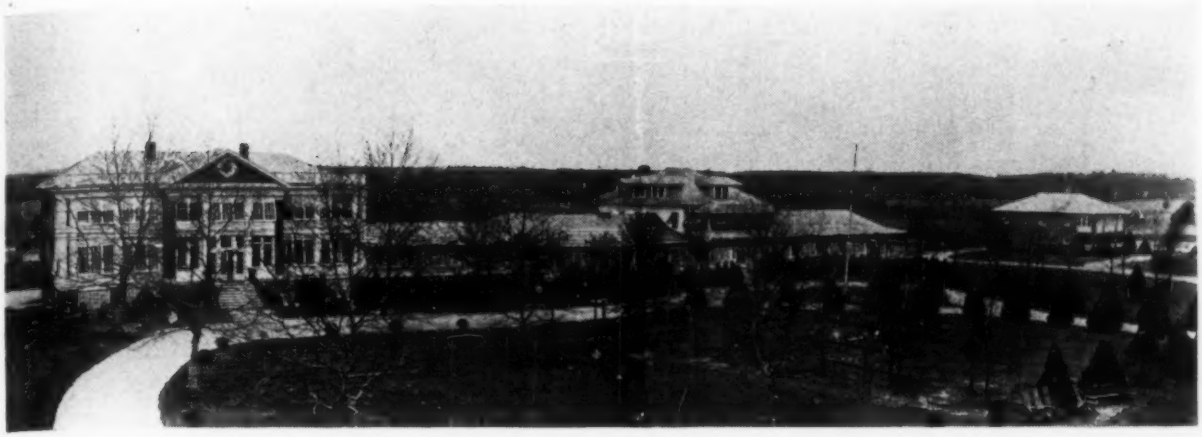


Shonghum Mountain Sanatorium

Morristown, New Jersey

Shonghum Mountain Sanatorium was established in 1914 and was completely remodeled. A new hospital building was added in 1940. Its present capacity is 76 beds. All types and stages of tuberculosis are admitted. Only residents of Morris County are eligible for admittance. Dr. Harold S. Hatch is Superintendent and Medical Director.

New Jersey Sanatoria



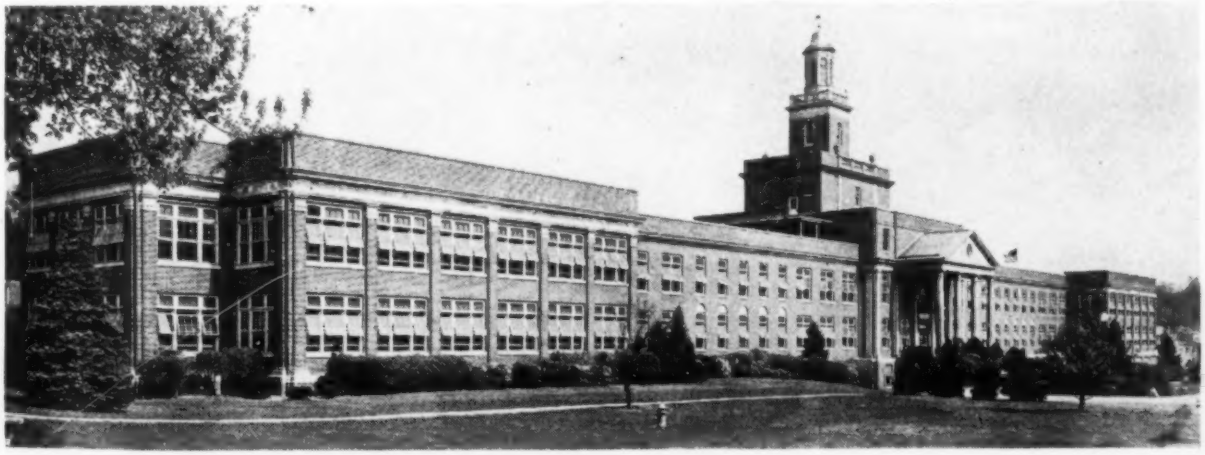
Fairview Sanatorium

New Lisbon, New Jersey

Fairview Sanatorium, the Burlington County Sanatorium for Tuberculosis, was opened in September, 1917, with a capacity of 25 beds and now has a capacity of 114 beds. It admits all stages of tuberculosis, both pulmonary and surgical.

The sanatorium has a fully equipped laboratory, and an x-ray department. Pneumothorax, phrenic and pneumonolysis operations are done in the sanatorium. Thoracoplasty operations are done in a general hospital.

Dr. Marcus W. Newcomb has been Superintendent and Medical Directors for 23 years.



Valley View Sanatorium

Paterson, New Jersey

Valley View Sanatorium is a 230-bed institution, carefully planned and equipped for the care and treatment of all types of cases of tuberculosis, and is located in the Preakness Hills overlooking the Passaic Valley.

Since the opening of the institution in 1929, approximately 3,000 patients have been admitted for treatment.

The sanatorium employs a county tuberculosis clinician who carries on a diagnostic clinic service, county-wide, through the various health departments located in the cities of the county.

New Jersey Sanatoria

Bergen Pines

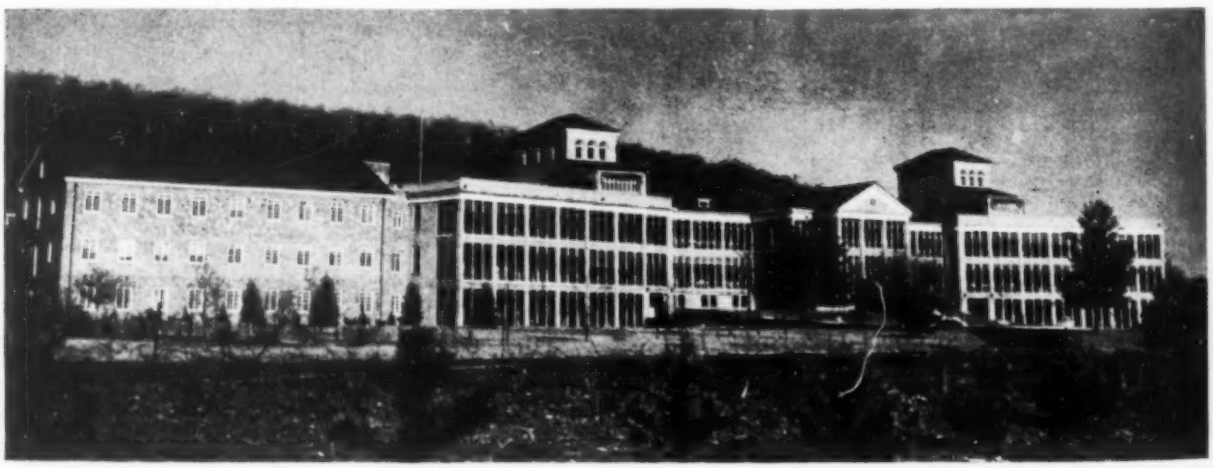
(Bergen County Hospital)

Ridgewood, New Jersey

"Bergen Pines," Bergen County Hospital, was opened in August, 1916, for the admission of poliomyelitis cases during the worst epidemic in history. Shortly thereafter a tuberculosis department was established which now comprises the greater amount of the patient census population in this 500-bed sanatorium.

Set out in park-like surroundings, the institution now comprises six modern hospital units equipped in the most scientific manner, with additional service buildings. Here residents of the county suffering from tuberculosis or other communicable diseases are admitted. It has a progressive department of thoracic surgery and a modern laboratory. There is also an actively functioning out-patient department with diagnostic clinic. X-ray facilities are located in strategic points in the county. The central clinic is in the sanatorium.

"Bergen Pines" has a preventorium which has functioned successfully for a number of years, and a therapeutic pool donated by the Bergen County American Legion and American Legion Auxiliary, which is operated as an out-patient unit. Dr. Joseph R. Morrow is the Medical Director and Superintendent.



HOSPITAL BUILDING

Bonnie Burn Sanatorium

Scotch Plains, New Jersey

Bonnie Burn Sanatorium was opened in November, 1912, with 64 patients; it now has a capacity of 400. Children are admitted in a separate building. Accepts all stages of tuberculosis in any form, bronchiectasis, asthma and other forms of pulmonary disease. Limited to residents of the county. The Superintendent and Medical Director is Dr. John E. Runnells.

New Jersey Sanatoria

ADMINISTRATION BUILDING

Essex Mountain Sanatorium

Verona, New Jersey

The Sanatorium was founded in 1908 as Newark City Hospital and acquired by the county in 1917 and operated since then as the Essex County Sanatorium.

The physical plant consists of twenty-one buildings with a capacity for 445 patients.

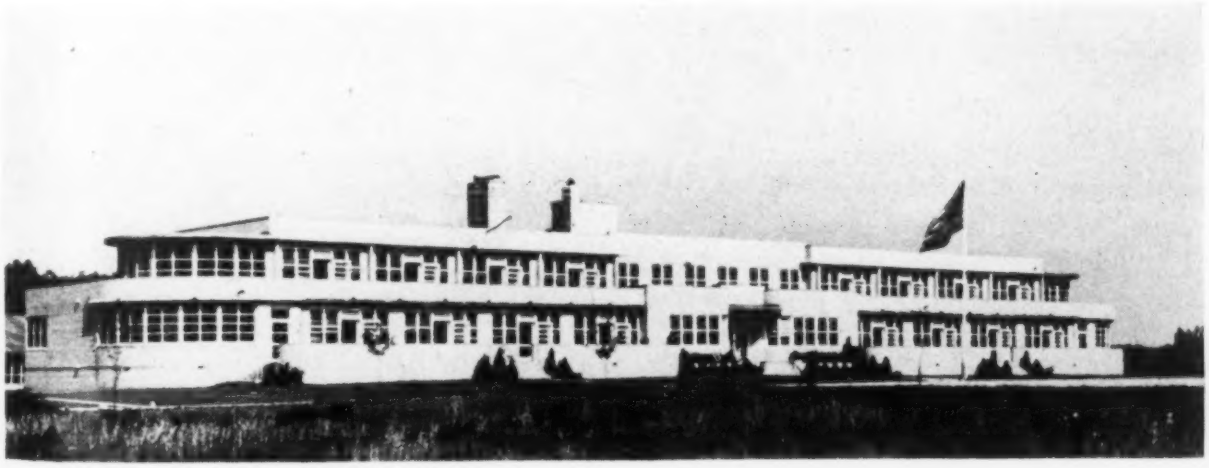
It has its own power supply, water supply and sewage disposal system.

Patients in all stages and all forms of tuberculosis are accepted.

Equipment consists of a complete surgical department covered by the resident surgeon, performing all kinds and stages of thoracoplasties, bronchoscopies, pneumolyses and other modern chest surgery procedures.

The x-ray department has a laminograph, photoroentgen unit and a portable x-ray machine in addition to three fluoroscopes. An out-patient clinic serves all outside patients for follow-up and pneumothorax refills.

Dr. B. M. Harman is the Superintendent and Medical Director.



Atlantic County Hospital for Tuberculous Diseases

Pleasantville, New Jersey

The new Atlantic County Hospital for Tuberculous Diseases located at Northfield, New Jersey, is a fireproof building of modern design and appointments, which was opened for the admission of patients on September 15, 1941.

This institution replaces the former sanatorium which was erected in 1916. It is maintained by the County and only those who have a legal residence in the county are admitted as patients.

The institution is arranged for the accommodation of one hundred patients and has a fully equipped operating room, clinical laboratory, x-ray and the other facilities necessary for the care and treatment of all forms of tuberculosis. Mr. Leon Conover is the Superintendent and Dr. Clyde M. Fish is the Medical Director.

The New Jersey Plan for Tuberculin Testing and X-Raying High School Students as Carried Out in Bergen County*

JOSEPH R. MORROW, M.D.
Ridgewood, New Jersey

Legislation

In 1940 there went into effect the following law in the State of New Jersey:

> "Effective July 4, 1940, Boards of Education must periodically determine the presence or absence of active or communicable tuberculosis. . . . The frequency of the examination, the procedure to be followed, and the selection of pupils are prescribed by the rules of the State Board of Education. Any pupil found to have communicable tuberculosis must be excluded until proof of recovery is established."

Chapter 294 of the School Health Bill providing that all High School pupils be tested for tuberculous infection and that all positive reactors be x-rayed prior to June 30, 1941, was then passed. For this purpose, the term "High School" was interpreted as grades 9-12 inclusive. From past experience, it was expected that approximately 30 per cent of the High School pupils would react positively.

Voluntary Surveys

Before the passage of this legislation, school surveys were conducted in Bergen County upon the request of health officials, Boards of Education and the school physicians. People became educated to the fact that the use of the chest x-ray is essential for the early discovery of tuberculosis since people apparently well may have early disease. Much effort was expended to impress upon the public the fact that tuberculin tests show whether or not a person has been infected with tubercle bacilli; "the x-ray demonstrates whether or not that infection has any significance."

We concentrated on High School students because of the high morbidity and mortality rate between the ages of 15 and 25, and since we knew that more cases of tuberculous infection would probably be found in this age group than in the lower grades. These were voluntary surveys in which the Bergen County Medical Society, the Bergen County Tuberculosis and Health Association, and the Bergen County Hospital cooperated with the various Boards of Education, school doctors and nurses. Emphasis was placed upon close cooperation with family physicians.

Preliminary Work

An intensive educational program was first carried out, the school physician and the supervising principal assuming responsibility for the survey. The medical staff of the Bergen County Hospital did the actual clinic work—giving the tuberculin tests, reading the reactions, x-raying reactors, and reporting the findings to the family physicians. The County Tuberculosis Association assumed financial responsibility and underwrote the cost of material used—literature, tuberculin (P. P. D.), paper capes for the girls, x-rays. This money was provided from Christmas Seal Sale funds in the county. Students requiring x-rays were requested to contribute 50 cents toward the cost of the film, if they could do so.

After a date for the survey had been decided upon, the room facilities and policy for reporting the findings to the family and school physicians were discussed. The physicians serving the community to be surveyed were then invited by letter to attend a meeting where the matter was presented to them. The importance of a follow-up on those with positive reactions who did not have an x-ray taken was stressed. At such meetings a sound motion picture on tuberculosis was shown by the Tuberculosis Association.

Teachers and school employees were then called together by the principal of the High School so that their interest and cooperation might be secured. The purpose of the survey was explained to them and they were also shown films and provided with literature on

*Much of the material must, of necessity, be in detail, since it was on the basis of such surveys, and the thoroughness and effectiveness of preliminary arrangements, that our State Law was passed.

tuberculosis. Students were reached in the same way, followed by an assembly program where an interesting and educational film on the subject was shown. *Intensive preliminaries are important.*

Before sending *request slips* (not consent slips) to the parents or guardians of the children for signature, a meeting was called to which parents were invited where the entire subject was gone into and they were urged to ask questions. It was made very clear that we were going to do something *for them* and not *to them*. Request slips were then given each student to secure the signature of parents or guardian.

Each school survey received wide newspaper publicity, copy being prepared by the County Tuberculosis Association and issued through the office of the supervising principal where the survey was to be made. Scientific facts were checked at the County Hospital.

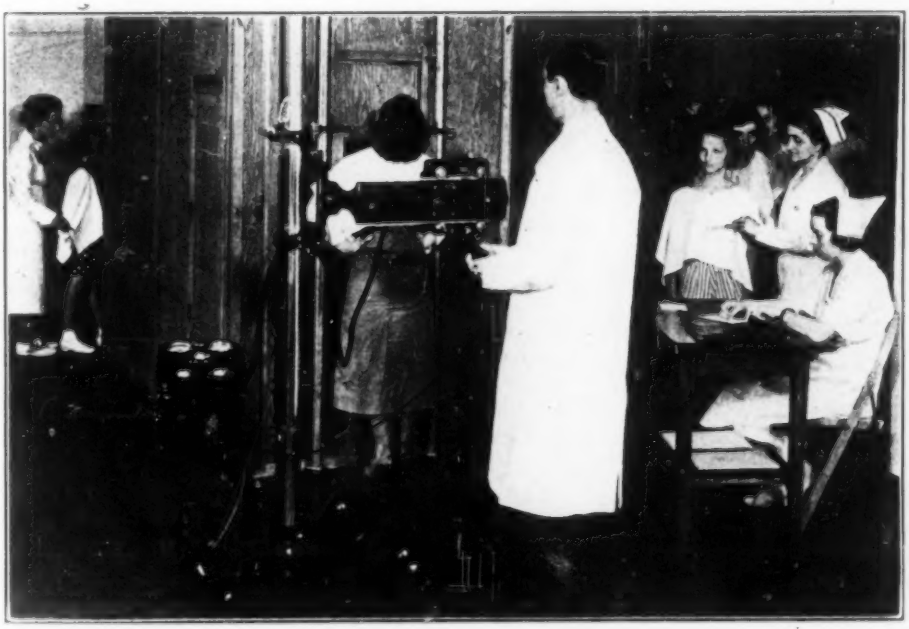
The Survey

The whole procedure was carried out rapidly and in an orderly manner. On the date set for the survey some of the medical staff, nurses, and clerks from the hospital would visit the school and set up the equipment for the tuberculin testing. In the early days of these voluntary surveys, P. P. D. was used. The County Tuberculosis Association would have nurses there to assist and the school nurse, physician, and principal also would be present.

A steady line of students bearing their request cards would file past the physicians for the tuberculin tests. These were read 48 hours after they were given and those showing a positive reaction would form a line and be x-rayed immediately after the test was read. A portable x-ray machine, transported and set up at the school by the sanatorium staff, was used. The film was the standard 14x17. A portable darkroom was devised at the hospital and transported to the school, thus permitting immediate developing of every tenth film as a check on the technique.

With this method, two physicians, assisted by three nurses and two clerks, were able to test 600 students an hour and x-ray reactors at the rate of 90 to 100 per hour, provided the students came in uninterruptedly. The films were then taken to the County Sanatorium, developed there and interpreted by the medical staff. To these "readings" were invited the school physician where the survey was made, and the doctors in the community. A complete report of the examination of each student was prepared by the personnel of the County Hospital and sent to the school physician and family physician. Such reports contained the results of tuberculin testing, x-ray findings, diagnosis, and recommendations.

It must be remembered that this work, carried on over a period of five years, was entirely *voluntary*.



X-raying of positive reactors.

HIGH SCHOOLS SURVEYED IN BERGEN COUNTY

Year	No. Tested	Percentage Positive	X-Rays	Active Tuberculosis
1935-1936	531	51.4	273	2
1936-1937	3,297	42.1	1,389	9
1937-1938	2,485	38.99	969	3
1938-1939	6,347	29.76	1,889	1
1939-1940	1,853	26.9	500	4

One can readily see from the foregoing that the amount of time and energy expended were tremendous. However, it was well worth the effort, for, as someone has remarked: "Bergen County's effectiveness and efficiency to a large extent set the pace for the state, and the state for the nation." It was really a noteworthy achievement.

These surveys came to be almost a matter of routine; not only the physicians of the county, but the students and their parents came to regard tuberculin testing and x-raying as well worthwhile. Fine cooperation from the doctors was had all the way through. Some of the doctors in the medical society who strenuously insisted that it would interfere with their private practices found in reality that it put patients in their offices. They changed their opinion and many remarked that families whom they had not seen since the birth of the youngsters now came to their offices.

Schedule Since Passage of the Law

Upon the passage of the State Law certain regulations were formulated. Although the Bergen County Hospital and the County Tuberculosis Association are still participating organizations, their work is very much less.

The following schedule was worked out:

1) Bergen County Hospital agrees to be responsible for the technical service and will supply technicians, nurses, and equipment for the surveys.

2) The County Tuberculosis Association will assist with organization and with educational programs preceding the survey, supplying necessary literature and teaching aids and the tuberculin for the skin tests.

3) The County Tuberculosis Association agrees to underwrite the cost of the x-ray plates and bill local Boards of Education at the rate of 50 cents, the actual cost of the film, for each x-ray made.

The superintendent of schools of Bergen County sent a notice to all secretaries and Boards of Education to the following effect:

"If you choose to employ these aforementioned agencies, arrangements for tuberculin testing must be made in writing to the Executive Secretary of the Bergen County Tuberculosis and Health Association. *The Board of Education may choose to have this testing done in any way it chooses in compliance with the law. The above plan is offered in good faith and was formulated to assist in expediency in a new departure.*"

However, no commercial agency has been called in. The surveys are still conducted by these interested and cooperating agencies where the health angle is stressed. The survey is carried on for this purpose, not for any pecuniary gain, since none accrues. As a matter of fact, these participating agencies do this at a loss so far as time and money are concerned; but it is counted *gain* considering the results, which are far-reaching. School films also very often prove to be a great help in future years in cases of tuberculosis and its eradication. All the Boards of Education in the County cooperated since the voluntary surveys which the County Hospital and Tuberculosis Association had conducted, were known to all.

In conducting the testing and surveying, after the passing of the State Statute in 1940 a change was made in tuberculin from P. P. D. to the Patch Test. This was found to give practically the same results as the previous method and the students, parents, and school personnel seem to like it better. Many persons dislike the idea of an injection. Furthermore, the school doctors can apply these patches with assistance from the medical staff of the County Hospital in reading the results.

The law is interpreted to mean that once in the High School life of a youngster (grades 9-12 inclusive) he should have a tuberculin test, with an x-ray if a positive reactor. Employees are to be tested once in three years, an employee being any person who is in the employ of the Board of Education.

Since this State Law has gone into effect, we have obtained the following results from the High School surveys:

Year	No. Tested	Percentage Positive	X-Rays	Active Tuberculosis
1940-1941	18,428	14.03	3,341	17
1941-1942	19,018	15.91	3,294	10

The educational value of this work cannot be overestimated. It paves the way for establishing a routine program, now strongly advocated, of x-raying all admissions to general hospitals. It is not necessary to dwell on the known fact that student nurses and hospital employees are being given particular attention along this line.

Because our work in conducting surveys is so well known throughout the county, we have been asked to conduct them among other groups, notably prisoners, industrial plants, National Youth Administration workers, etc. Such clinics often combine the taking of blood for a Wassermann test at the same time, the specimens being examined at the county laboratory which is also located at the hospital. There are many persons reached through these clinics or surveys whom we would otherwise not contact.

We need to keep in mind the fact that future legislation may widen the scope of work, particularly among food handlers and expectant mothers. Many of the individual physicians in Bergen County are already doing fine work among the latter group by having prenatal cases tuberculin tested, and x-raying the positive reactors. The 4x5 film will doubtless facilitate all these programs.

We in Bergen County feel that we can take just credit for our five years of voluntary work conducting surveys in secondary schools. Such surveys have proved their value conclusively. We in New Jersey are proud of the fact that our state is the first one to pass legislation making tuberculin testing, with x-raying of positive reactors, mandatory in our High Schools, an important step toward the ultimate elimination of tuberculosis.

New Jersey Chapter Meets

The New Jersey Chapter of the American College of Chest Physicians held its Fall Meeting at Bergen Pines, Ridgewood, New Jersey, on Friday, September 25th. Dr. Joseph R. Morrow, President of the Chapter, presided.

Dr. George M. Levitas of Westwood, member of the Board of Managers of Bergen Pines, made the welcoming address. He discussed the views of the general practitioner on tuberculosis in contrast to the specialist.

Dr. J. Winthrop Peabody of Washington, D. C., President of the American College of Chest Physicians, spoke on the "Aims of the American College of Chest Physicians." He discussed the following essential factors: (1) the organization of the College eight years ago; (2) the adoption of the new by-laws at the annual meeting in Atlantic City this year; (3) the plans for organizing a Board of Specialists for diseases of the chest and for research in pulmonary diseases; (4) rigid requirements for admission to the College; (5) an exclusive membership, both national and international; (6) the organization of chapters, both national and international; (7) closer relations and cooperative meetings between the various chapters; (8) instruction in chest diseases for the general practitioner; (9) joint sessions with specialists in diseases closely related to diseases of the chest; (10) the work of the Council on Undergraduate Medical Education; (11) the progress and expansion of the official journal "Diseases of the Chest," and (12) future plans for the College.

Dr. Samuel Alexander, Freeholder of Bergen County, declared that public opinion was a big factor in the eradication of tuberculosis because it brought about the erection of such fine county institutions as Bergen Pines.

Dr. B. S. Pollak, Medical Director of the Hudson County Tuberculosis Hospital, pointed with pride to the fact that the medical men, many of them members of the New Jersey Chapter of the College, had been instrumental in impressing the Legislature of the need for passing the law which made tuberculin testing compulsory for High School students, and school personnel in New Jersey.

Dr. Samuel B. English, Medical Director, Glen Gardner, New Jersey State Sanatorium, also spoke, as well as many of the others who were present.

An x-ray symposium was held following the meeting. Interesting and unusual x-rays were presented and discussed.

Others present were: Dr. Clyde Fish, Medical Director, Atlantic County Tuberculosis Hospital and Vice-President of the New Jersey Chapter; Dr. Irving Willner, Secretary of the New Jersey Chapter; Dr. Harold S. Hatch, Superintendent, Morris County Tuberculosis Hospital; Dr. Stephen A. Douglass, Superintendent, Passaic County Sanatorium; Dr. D. L. Melvin, Greystone Park; Drs. David Biber and H. H. Cherry, Valley View Sanatorium; Dr. B. S. Pollak, Medical Director, and Dr. B. J. Elwood, Hudson County Tuberculosis Hospital; Dr. Samuel B. English, Superintendent, and Dr. Elliot I. Dorn, New Jersey Sanatorium for Tuberculous Diseases; Dr. Byron M. Harman, Superintendent and Medical Director, and Dr. W. F. Bennett, Essex County Sanatorium; Dr. John E. Runnells, Superintendent, Union County Sanatorium; Dr. H. Barenblatt, Medical Director, Deborah Sanatorium; Dr. M. James Fine, Newark; Dr. B. J. Ellmers of New Milford; Mr. George M. Buch, Mercer Hospital; Dr. Emil Frankel, Division of Statistics and Research, Department of Institutions and Agencies, Trenton.

From the Bergen Pines staff were present: Drs. A. Louis Gramsch, Arthur Denchfield, Monroe Tanner, Grace Seagrave, Robert Lenz and Bernard Stolz.

The following members of the New Jersey Chapter are now serving with the Armed Forces: Major Irving L. Applebaum, Captain Paul K. Bornstein, Captain William M. Kennedy, and Captain Meyer T. Weissman.

Organization News

SOUTHERN CHAPTER OF COLLEGE TO BE ORGANIZED

A luncheon meeting of the members of the American College of Chest Physicians in the southern states will be held at the John Marshall Hotel, Richmond, Virginia, Tuesday, November 10, at one o'clock.

A Southern Chapter of the College will be organized at this meeting and officers will be elected. Dr. J. Winthrop Peabody, Washington, D. C., president of the College, will be the guest speaker.

Plans will be made for the Southern Chapter of the College to meet annually with the Southern Medical Association. The Southern Medical Association meets this year at Richmond, Virginia, October 10-12th. An excellent scientific program has been arranged for this meeting.

Dr. Dean B. Cole, Richmond, Governor of the College for Virginia, is the Chairman of the General Arrangements Committee for the Luncheon Meeting.

ADDITIONAL LIST OF MEMBERS COMMISSIONED IN THE MEDICAL CORPS

United States Army

Major Philip H. Narodick, Seattle, Washington, stationed at U. S. General Hospital, Unit 50, Camp Carson, Colo.

Captain George F. Evans, Clarksburg, West Virginia, stationed at 29th Station Hospital, Camp Rucker, Alabama.

Captain Henry Felson, Cincinnati, Ohio; stationed at Army Medical Center, Washington, D. C.

Captain Joseph G. Rosenbaum, Brecksville, Ohio, stationed at Morrison Field, West Palm Beach, Florida.

1st Lieut. Elmer E. Kottke, Des Moines, Iowa, stationed at Fitzsimons General Hospital, Denver, Colorado.

1st Lieut. David A. Nathan, Miami Beach, Florida, stationed at Station Hospital, Camp Maxey, Texas.

1st Lieut. Jacob Schloss, Middletown, New York, stationed at Westover Field, Chicopee Falls, Massachusetts.

Lieut. Colonel Howard B. Kellogg, Seattle, Washington, stationed at General Military Hospital No. 50, Camp Carson, Colorado.

Major Roger J. Hanna, Jackson, Michigan, stationed at Bushnell General Hospital, Brigham City, Utah.

Major George L. Leslie, Howell, Michigan, stationed at Stark General Hospital, Charleston, South Carolina.

Major Thomas O. Nuzum, Janesville, Wisconsin, stationed at Salt Lake City, Utah.

Major Stuart Yntema, Saginaw, Michigan, stationed at Hospital Station 1605, Fort Custer, Michigan.

United States Navy

Lt. (jg) Harry E. Tebrock, Atlantic City, New Jersey, stationed at Potomac Annex Bldg. No. 5, Washington, D. C.

Lieut. Abraham Feinberg, New York, N. Y., stationed at U. S. Naval Hospital, Philadelphia, Pa.

Lieut. Joseph C. Placak, Jr., Cleveland, Ohio, stationed at U. S. Naval Hospital, Great Lakes, Illinois.

Lieut. Charles A. Seelig, Jackson Heights, L. I., New York, stationed at Navy Yard, New York, New York.

CHANGES OF ADDRESS

Dr. Harry Joseph Treshler, formerly Pennsylvania State Hospital, Cresson, Pa.; now at Michigan State Sanatorium, Howell, Mich.

Dr. Louis J. Miller, formerly 3215 W. North Ave., Chicago, Illinois; now at 2021 N. Whipple St., Chicago, Illinois.

Dr. Sherwood C. Lynn, formerly 222 E. Jones St., Savannah, Georgia, now at 118 E. Jones St., Savannah, Georgia.

Dr. Norman W. Heysett, formerly Edward Sanatorium, Naperville, Illinois; now at Irene Byron Sanatorium, Fort Wayne, Indiana.

Dr. Thomas L. Dwyer, formerly State Sanatorium, Mt. Vernon, Missouri; now at Vandalia, Missouri.

Dr. Arthur E. Lamb, formerly 430 Clinton Avenue, Brooklyn, New York; now at 339 Washington Avenue, Brooklyn, New York.

Dr. Walter C. Reineking, formerly Lake View Sanatorium, Madison, Wisconsin; now at Greenwell Springs Tuberculosis Hospital, Greenwell Springs, Louisiana.

Dr. W. A. Beasley, formerly Box 207, Stillwell, Oklahoma; now at Kings-Tulare Joint Tuberculosis Sanatorium, Springville, California.

Dr. Allen A. Tombaugh, formerly Rocky Glen Sanatorium, McConnelsville, Ohio; now at Pleasant View Sanatorium, Amherst, Ohio.

Dr. Philip C. Welton, formerly Buena Vista Sanatorium, Wabasha, Minnesota; now at 130 S. Scott St., Tucson, Arizona.

Dr. Richard M. Burke, formerly Western Oklahoma Tuberculosis Sanatorium, Clinton, Oklahoma; now at 117 N. Broadway, Oklahoma City, Oklahoma.

Dr. Herbert F. Schwartz, formerly Robert Koch Hospital, Koch, Missouri; now at 50 Elsmere Avenue, Elsmere, New York.

Dr. Leon J. Galinsky, formerly State Sanatorium, Oakdale, Iowa; now at Fort Logan, Colorado.

Dr. T. Ashby Woodson, formerly Waverley Hills Sanatorium, Waverley Hills, Kentucky; now at 72 Valley Road, Louisville, Kentucky.

Dr. Charles A. Seelig, formerly 104 East 40th St., New York, N. Y.; now at 33-17 70th Street, Jackson Heights, L. I., N. Y.

Dr. William L. Cooke, formerly 404 Brooks St., Charleston, W. Va.; now at 5 Roller Road, Charleston, W. Va.

Dr. E. J. Thomas, formerly 441 Washington Ave., Miami Beach, Fla.; now at 8834 Abbott Avenue, Miami Beach, Fla.

Dr. P. C. Burnett, formerly Battle Hill Sanatorium, Atlanta, Georgia; now at Saginaw County Hospital, Saginaw, Michigan.

Dr. Herbert Weinberger, formerly Healthwin Hospital; now at Ahwahnee Sanatorium, Ahwahnee, California.

Dr. Lawrence M. Serra, formerly 104 W. Madison St., Baltimore, Maryland; now at 11 East Chase Street, Baltimore, Maryland.

Dr. John K. Shumate, formerly Pureair Sanatorium, Bayfield, Wisconsin; now at Lake View Sanatorium, Madison, Wisconsin.

Dr. Joseph Walsh, formerly No. 921 Penn Athletic Club, Philadelphia, Pa.; now at Hotel Belgravia, 1811 Chestnut St., Philadelphia, Pa.

Dr. F. H. Alley, formerly Victor C. Vaughn House, Ann Arbor, Michigan; now at Oakville Memorial Sanatorium, Oakville, Tennessee.

Dr. Thomas C. Black, formerly State Tuberculosis Sanatorium, Orlando, Florida; now at Western Oklahoma T. B. Sanatorium, Clinton, Oklahoma.

DR. PECK DECEASED

As we go to press with this issue of the Journal, we are shocked to learn of the sudden death of Dr. John H. Peck, Oakdale, Iowa.

Dr. Peck died at the Iowa State Tuberculosis Sanatorium of a coronary thrombosis, October 19th.

He served as the president of the American College of Chest Physicians from 1940-1941. He also held high office in many other organizations. He served as the president of the National Tuberculosis Association and the Iowa State Tuberculosis Association.

We know that his many friends throughout the world will mourn his loss. When notice of his death was received, plans for his funeral were still pending.

A detailed obituary of Dr. John H. Peck will be published in a future issue of *Disease of the Chest*.

IN MEMORIUM

DR. WARREN C. BREIDENBACH

1894-1942

Dr. Warren C. Breidenbach died at Dayton, Ohio, on June 30, 1942. His death was an untimely loss of a hard and enthusiastic worker in the field of tuberculosis. Renal disease for many years culminated in the inevitable cardiac and arterial damage with circulatory failure. Dr. Breidenbach was born in Piqua, Ohio, January 27, 1894. Following his graduation from high school at Piqua, he attended the Ohio State University for one year. He completed his academic work at the University of Michigan and was then graduated in Medicine from the same institution in June, 1917. He served his interneship at the Miami Valley Hospital in Dayton, Ohio. In July, 1918, he was appointed house physician at the same hospital and served in this capacity for one year. In February, 1920, he was appointed Medical Superintendent of Stillwater Sanatorium and served in this capacity until his death. He has always been actively identified with local, state and national organizations in the field of diseases of the chest. He was consultant in diseases of the chest at the Miami Valley Hospital, Good Samaritan Hospital in Dayton, Ohio, and also to the United States Soldiers' Orphans Home at Xenia, Ohio. He was a Fellow of the American College of Physicians and American College of Chest Physicians; a Diplomate of the American Board of Internal Medicine; Associate Fellow of the American College of Thoracic Surgery; and a member of the American Trudeau Society. He made numerous valuable contributions to medical literature in the field of respiratory diseases, particularly in the use of the Laminograph in x-ray study of the lung.

He was married to Elaine Hoyt Rasch of Detroit, Michigan. Surviving him are his wife; a son Warren, Jr., now in his second year of Medicine at Harvard University; Elise Jane who just completed two years of study at the Connecticut College for Women; and Frederick who is attending Oakwood High School.

Warren won and enjoyed close and wide friendships among his medical colleagues throughout the country. He was devoted to his home and family. I remember particularly that one year ago he showed me a letter he had just received from his son, Warren, Jr., who was then a freshman at Harvard University Medical School. Warren, Jr., had just attended the opening convocation address at the Medical School. In this splendid letter he spoke of the deep inspiration he had just received from the address. He then told of the great devotion he had for his home and his father and how this address had been only a renewal of much inspiration he had received previously from his father for the study and practice of medicine. It was only another example of Warren giving and transmitting true enthusiasm for the practice of medicine which he loved.

John H. Skavlem, M.D.,
Governor for Ohio.